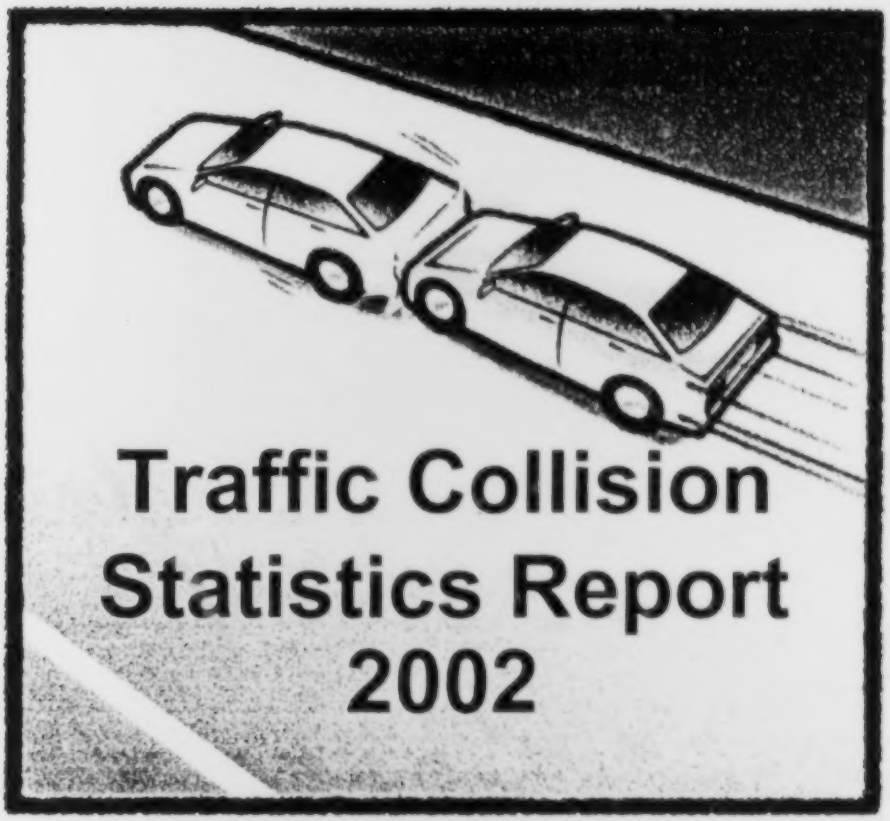

Traffic Collision Statistics Report 2002

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By law, all traffic collisions on public roads resulting in fatalities, injuries, or combined damage exceeding $1,000 must be reported to a law enforcement agency for entry onto Traffic Accident Reports. The information is keyed into the computerized database of the Division of Driver and Vehicle Licencing and the Traffic Engineering Branch, both of which form part of Manitoba's Department of Transportation and Government Services.

The data is used to analyze the reasons why accidents occur. These "contributing factors" include driver actions, the mental and physical condition of drivers, vehicle and weather conditions. Part II identifies precise locations of highway collisions, serving to indicate possible problem areas.

Identifying rates of collision occurrence by a wide variety of factors broadens the range of safety initiatives. This ties in closely with Canada's Road Safety Vision 2010, a national effort aimed at making Canada's roads the safest in the world. It intends to achieve this by alerting the public to key road safety issues, promoting co-operation among road safety agencies, and improving the quality of collision data.

The Traffic Collision Statistics Report is a valuable indicator of the current state of road safety in Manitoba. It enables Government to pinpoint areas for review by traffic safety experts, policy and programming personnel, and legislative and regulatory agencies.

Today, Manitoba is home to more than 715,000 licenced drivers, which represents a 6.4% increase in 10 years. As well, more than 828,000 registered vehicles operate in the province along with another 31,000 registered off-road vehicles.

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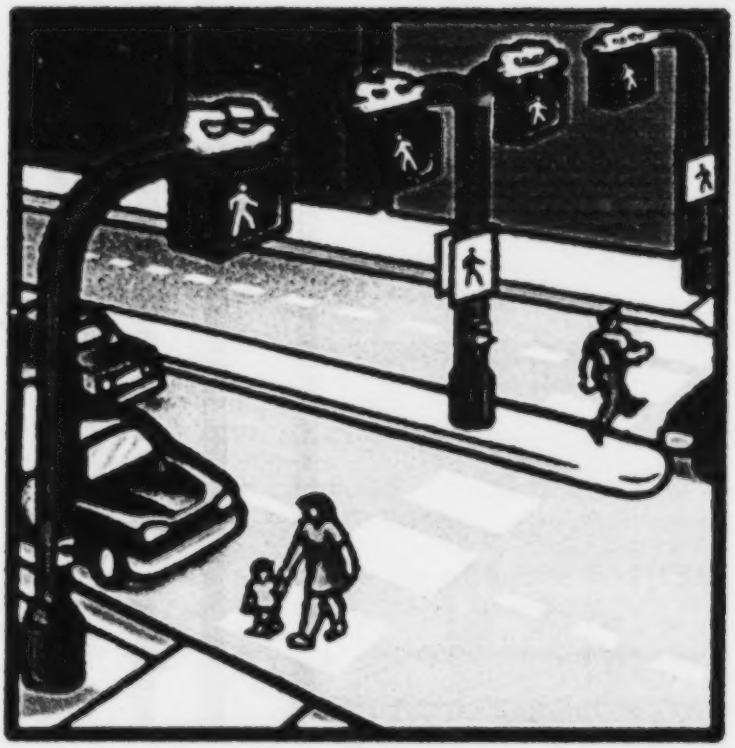
Part 1

Driver, Vehicle and Traffic Collision Statistics Report



The Driver, Vehicle and Traffic Collision Statistics Report contains information obtained from all "reportable" traffic accidents in Manitoba. Collision statistics are presented in a series of tables and graphs matching nationally recognized factors such as driver action and condition, vehicle condition and environmental circumstances, including highway condition.

The first section of the report establishes collision rates for licenced drivers and registered vehicles. These rates have been established at 1/1,000 for the total number of drivers and for the total number of registered vehicles involved in all collisions. However, within each group of fatal, injury and property damage collisions the rates for both categories have been set at 1/10,000 to reflect the lower numbers of each subset.

Figures are provided for the 1993 - 2002 period for licenced drivers and for the 1997 - 2002 period for registered vehicles.

Section 2, Licenced Drivers, provides a breakdown by age and gender of data contained in the master data files. Licence status (active or suspended) is also indicated. Section 3, Vehicle Registrations, covers three vehicle categories: Non-Commercial, Commercial, and Off-Road and excludes lapsed, cancelled and suspended vehicle registrations.

Sections 4 through 10 contain collision data compiled from traffic accident reports processed by the Division.

Section 11, dealing with Off-Road Vehicle Collisions, also uses accident data obtained from traffic accident reports.

Section 12, Alcohol-Related Criminal Code Convictions, highlights drinking and driving convictions in Manitoba from 1987 to 2001 and also provides comparison data for the years 1986, 1990 and 2001.

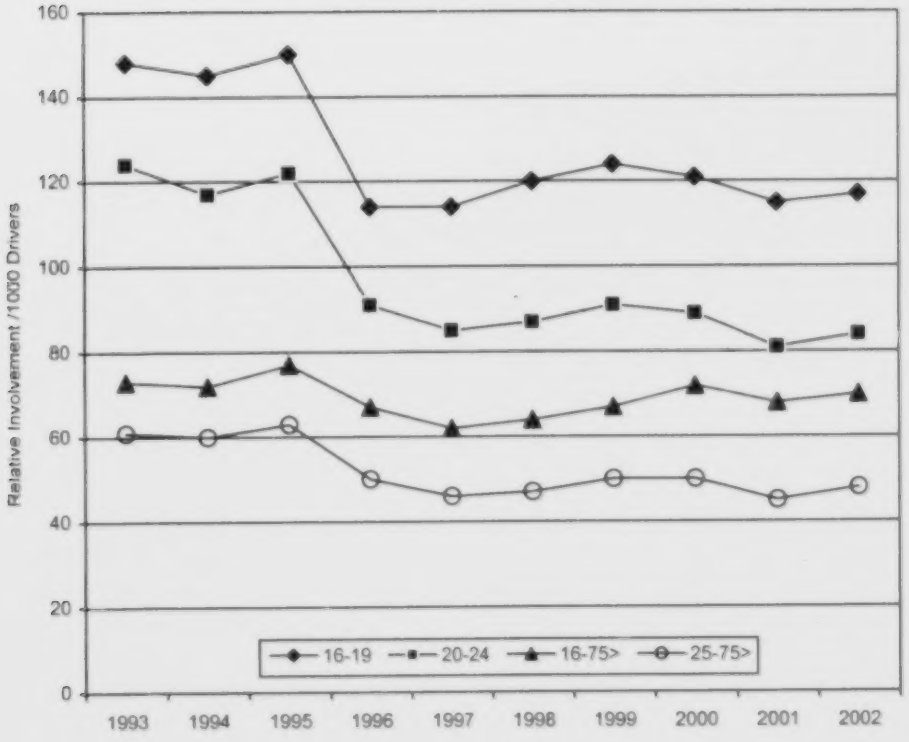
Annual collision statistics are used to:

- indicate trends,
- identify problem driver and vehicle factors,
- evaluate current programs and new provincial road safety initiatives,
- monitor commercial vehicle collisions in accordance with the National Safety Code,
- identify highway locations which may require improvement from a safety and a highway planning perspective, and
- guide development of new policies and programs to reduce the frequency and severity of traffic accidents in the province.

Other government agencies and organizations use the annually published collision data. These include law enforcement agencies, research organizations, consultants, medical groups, and schools and universities having an interest in highway safety. Manitoba Public Insurance's Road Safety Department uses collision data to target and address safety issues from an insurance perspective. The Manitoba Safety Council uses collision data to develop driver improvement and other driver-related safety programs. On a national level, Transport Canada uses the collision data to maintain their fatal and injury accident data base development for national safety standards and to monitor highway safety across Canada.

Section 1

Drivers, Vehicles, and Collision Rates
Historical Trends



Fatal, Injury, and Property Damage Collisions by Total Licenced Drivers[1] 1993 – 2002

Year	Licenced Drivers	Total Collisions	Collisions /1,000 Drivers	Total Fatal	Fatal /10,000 Drivers	Total Injury	Injury /10,000 Drivers	Total P. Damage	P. Damage /10,000 Drivers
1993	672937	29435	43.7	106	1.6	10906	162.1	18423	273.8
1994	675659	29744	44.0	98	1.5	9706	143.7	19940	295.1
1995	680142	32398	47.6	108	1.6	8783	129.1	23507	345.6
1996	684798	29089	42.5	79	1.2	7509	109.7	21501	314.0
1997	687229	27113	39.5	101	1.5	6698	97.5	20334	295.9
1998	692941	27124	39.1	109	1.6	6879	99.3	20136	290.6
1999	702851	28667	40.8	99	1.4	6959	99.0	21609	307.4
2000	706512	30973	43.8	92	1.3	6931	98.1	23950	339.0
2001	710456	30999	43.6	82	1.2	6656	93.7	24261	341.5
2002	715793	31983	44.7	99	1.4	6953	97.2	24931	348.3

[1] Licenced drivers include active and suspended drivers who held a valid licence within the licencing year.

Over the past 10 years, traffic collisions have increased by 8.7% (29,435 to 31,983) while licenced drivers have increased by 6.4%. Collision rates for licenced drivers have increased by 2.3% from 43.7/1,000 drivers in 1993 to 44.7/1,000 drivers in 2002. Fatal collision rates decreased by 12.5% from 1.6/10,000 drivers in 1993 to 1.4/10,000 drivers in 2002. Injury collision rates decreased by 40.0% from 162.1/10,000 drivers in 1993 to 97.2/10,000 drivers in 2002.

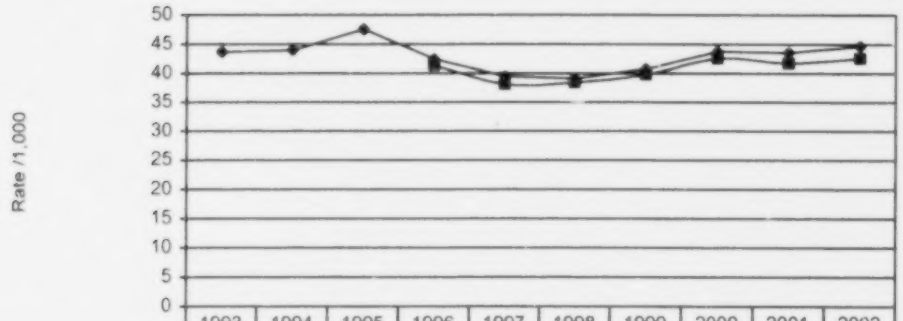
Fatal, Injury, and Property Damage Collisions by Vehicles Registered[1] 1996 – 2002

Year	Vehicles Registered [2]	Total Collisions	Collisions /1,000 Vehicles	Total Fatal	Fatal /10,000 Vehicles	Total Injury	Injury /10,000 Vehicles	Total P. Damage	P. Damage /10,000 Vehicles
1996	703072	29089	41.4	79	1.1	7509	106.8	21501	305.8
1997	711632	27113	38.1	101	1.4	6698	94.1	20334	285.7
1998	706541	27124	38.4	109	1.5	6879	97.4	20136	285.0
1999	719534	28667	39.8	99	1.4	6959	96.7	21609	300.3
2000	727562	30973	42.6	92	1.3	6931	95.3	23950	329.2
2001	742033	30999	41.8	82	1.1	6656	89.7	24261	327.0
2002	750631	31983	42.6	99	1.3	6953	92.6	24931	332.1

[1] Vehicles registered exclude lapsed, cancelled and suspended registrations. Since the latter numbers can only be calculated from 1996, that must serve as the base year.
[2] Vehicles registered exclude off-road vehicles, snow vehicles (HTA), trailers (HTA), tractors other than farm and PSV trailers.

Between 1996 and 2002, traffic collision rates have increased by 2.9% from 41.4/1,000 vehicles registered in 1996 to 42,6/1,000 in 2002. Fatal collision rates have increased by 18.2% from 1.1/10,000 registered vehicles in 1996 to 1.3/10,000 in 2002. Injury collision rates decreased by 13.3% from 106.8/10,000 registered vehicles in 1996 to 92.6/10,000 in 2002.

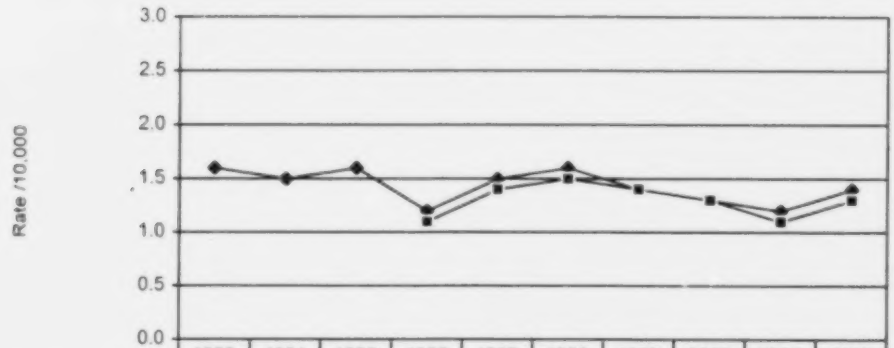
Total Collisions
/1,000 Licenced Drivers and Vehicles Registered
1993 - 2002 and 1996 - 2002



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Licenced Drivers	43.7	44.0	47.6	42.5	39.5	39.1	40.8	43.8	43.6	44.7
Vehicles Registered	n/a	n/a	n/a	41.4	38.1	38.4	39.8	42.6	41.8	42.6

This graph represents a 10-year history of collision rates by licenced drivers and a five-year collision rate for vehicles. The years 1997 to 1999 represented a low in collision rates for licenced drivers. The 2002 figures was the second highest driver involvement collision rate for the 10-year period.

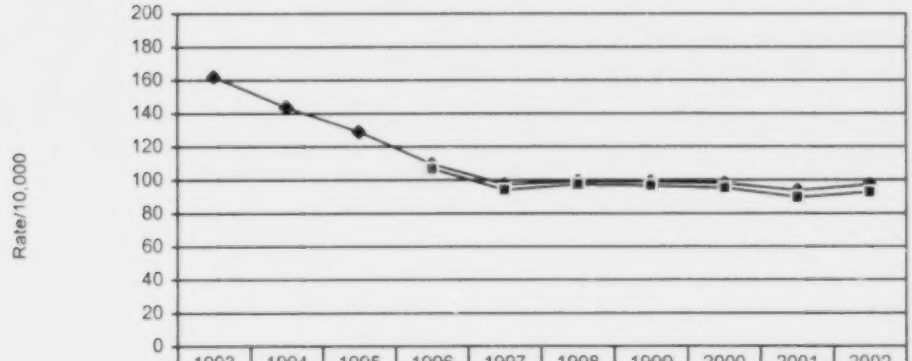
Fatal Collisions
/10,000 Licenced Drivers and Vehicles Registered
1993 - 2002 and 1996 - 2002



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Licenced Drivers	1.6	1.5	1.6	1.2	1.5	1.6	1.4	1.3	1.2	1.4
Vehicles Registered	n/a	n/a	n/a	1.1	1.4	1.5	1.4	1.3	1.1	1.3

Fatal collision rates by licenced drivers declined by 12.5% between 1993 and 2002. The rate of 1.2 per 10,000 licenced drivers recorded in 2001 was the lowest since 1996. The fatal collision rate by registered vehicles (1.3/10,000) was 18.2% higher than in 1996.

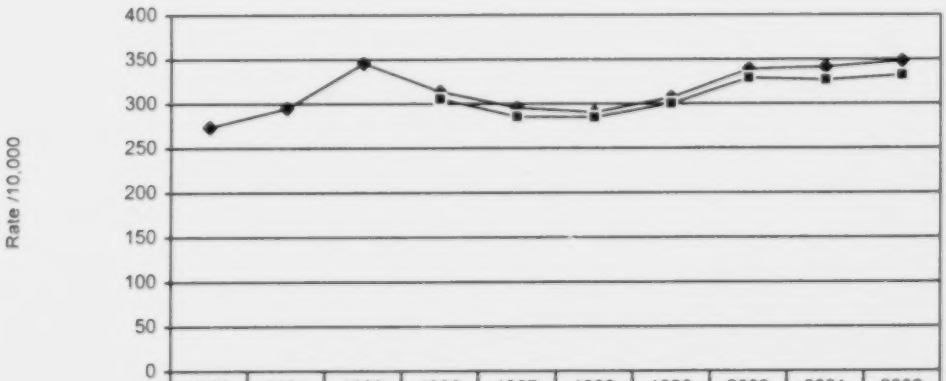
Injury Collisions /10,000 Licenced Drivers and Vehicles Registered 1993 - 2002 and 1996 - 2002



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Licenced Drivers	162.1	143.7	129.1	109.7	97.5	99.3	99.0	98.1	93.7	97.2
Vehicles Registered	n/a	n/a	n/a	106.8	94.1	97.4	96.7	95.3	89.7	92.6

Overall, injury collision rates for licenced drivers declined by 40.0%, from 162.1/10,000 in 1993 to 97.2/10,000 in 2002. Since 1993 injury collision rates gradually decreased to 97.5/10,000 in 1997, the lowest level in that five-year period. Since 1998 the rate remained relatively stable with the exception of 2001 when it dipped to 93.7/10,000. Injury collision rates by vehicles registered decreased by 13.2%, from 106.8/10,000 registered vehicles in 1996 to 92.6/10,000 in 2002.

Property Damage Collisions /10,000 Licenced Drivers and Vehicles Registered 1993 - 2002 and 1996 - 2002



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Licenced Drivers	273.8	295.1	345.6	314.0	295.9	290.6	307.4	339.0	341.5	348.3
Vehicles Registered	n/a	n/a	n/a	305.8	285.7	285.0	300.3	329.2	327.0	332.1

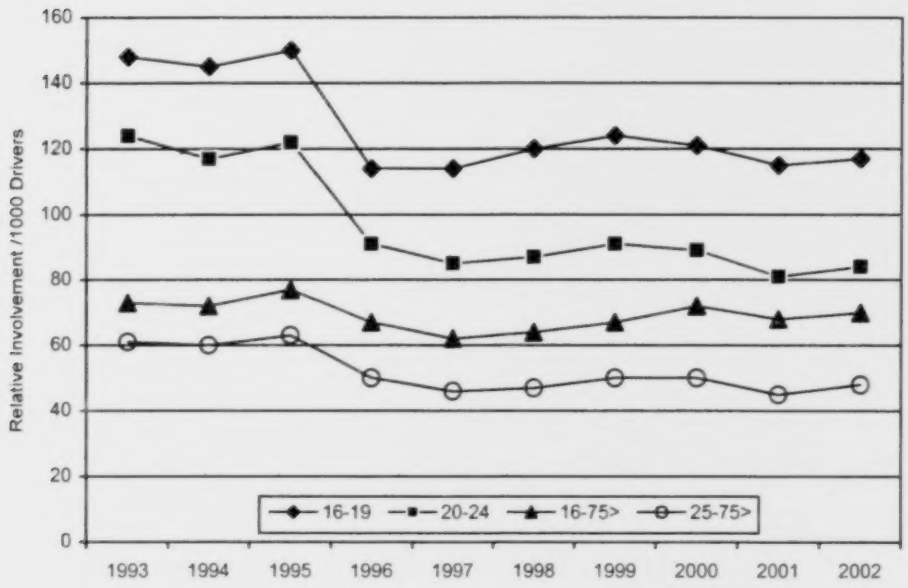
Property damage collision rates rose by 27.2% from 273.8/10,000 in 1993 to 348.3/10,000 in 2002 (licenced drivers) and by 8.6%, from 305.8/10,000 in 1996 to 332.1/10,000 in 2002 (vehicles registered).

Relative Involvement /1,000 Active Licenced Drivers by Age Group 1993 – 2002

Age Group	Year									
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
16-19	148	145	150	117	117	120	124	121	115	117
20-24	124	117	122	95	89	87	91	89	81	84
25-34	83	80	85	68	63	62	64	62	57	60
35-44	62	63	64	54	51	50	53	53	48	53
45-54	53	54	57	49	45	44	47	46	44	46
55-64	46	47	48	42	38	39	42	40	38	40
65-74	41	41	42	38	34	34	36	37	34	36
75>	43	43	45	38	33	36	38	38	38	36
Ages 16-75>	73	72	77	70	64	64	67	72	68	70
Ages 25-75>	61	60	63	50	46	47	50	50	45	48

Relative involvement rates indicate 16-19 year olds, followed by those aged 20-24, are more likely to be involved in collisions than any other age group. This explains why the relative involvement rates for all ages (16-75>) are substantially higher than for those aged 25-75> (70/1,000 versus 48/1,000).

Relative Involvement /1,000 Drivers by Selected Age Group 1993 – 2002



Section 2

Licenced Drivers

Class 1-5 Licenced Drivers
By Age Group, Sex and Driver Status

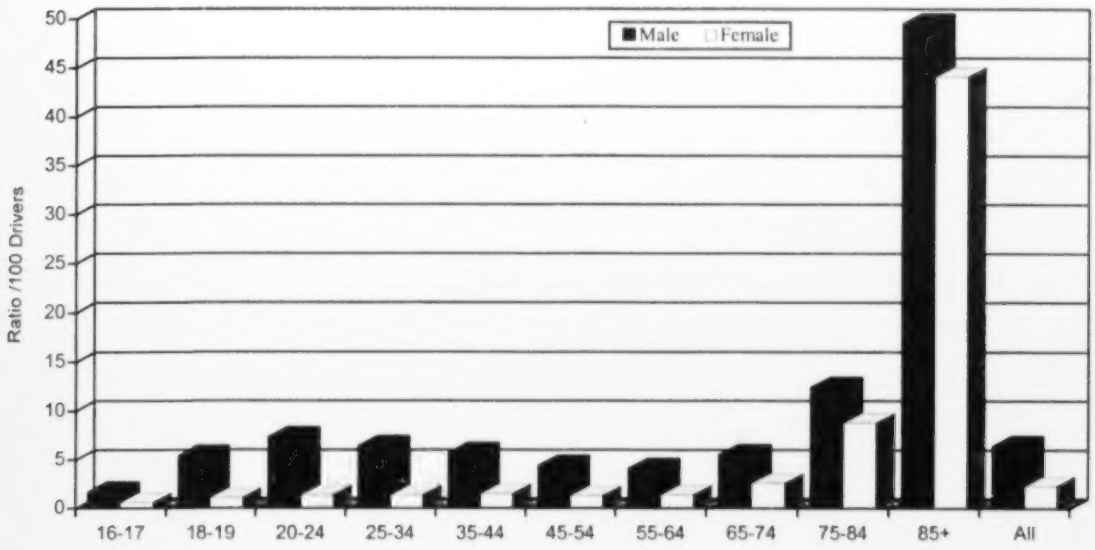
Age Group	Sex	Active Drivers	Suspended Drivers	Total Drivers	%	Suspended /100 Drivers
16-17	M	11934	208	12142		1.7
	F	10187	66	10253		0.6
	Total	22121	274	22395	3.1	1.2
18-19	M	12280	696	12976		5.4
	F	10300	118	10418		1.1
	Total	22580	814	23394	3.3	3.5
20-24	M	29290	2323	31613		7.3
	F	25362	350	25712		1.4
	Total	54652	2673	57325	8.0	4.7
25-34	M	60787	4186	64973		6.4
	F	53224	747	53971		1.4
	Total	114011	4933	118944	16.6	4.1
35-44	M	77598	4677	82275		5.7
	F	67103	1035	68138		1.5
	Total	144701	5712	150413	21.0	3.8
45-54	M	74083	3450	77533		4.4
	F	62586	826	63412		1.3
	Total	136669	4276	140945	19.7	3.0
55-64	M	50178	2166	52344		4.1
	F	40718	573	41291		1.4
	Total	90896	2739	93635	13.1	2.9
65-74	M	33130	1913	35043		5.5
	F	25726	675	26401		2.6
	Total	58856	2588	61444	8.6	4.2
75-84 *	M	18947	2690	21637		12.4
	F	14358	1385	15743		8.8
	Total	33305	4075	37380	5.2	10.9
85> *	M	3314	3252	6566		49.5
	F	1875	1477	3352		44.1
	Total	5189	4729	9918	1.4	47.7
All Ages	M	371541	25561	397102		6.4
	F	311439	7252	318691		2.3
	Total	682980	32813	715793	100.0	4.6

Active drivers include the annual average of drivers on file with a driver licence expiry date in the future. Suspended drivers refer to an annual average of drivers who are suspended.

* The rate of suspension for drivers aged 75+ is nearly three times higher than for drivers of all ages: 18.6/100 licenced drivers versus 4.6/100. This is primarily due to the fact that higher proportions of older drivers were indefinitely suspended for medical reasons.

Note: Since the vast majority of Class 6 licence holders also possess Class 1 to 5 licences, the numbers in the above table have been included in the previous Class 1 to 5 totals.

Comparison of Male and Female Class 1-5 Suspended Drivers /100 Licenced Drivers



Total Class 1-5 Licenced Drivers By Year and Driver Status 1993 - 2002

Licencing Year	Active Drivers	Suspended Drivers	Total Drivers
1993	646081	26824	672905
1994	648748	26877	675625
1995	652220	27922	680142
1996	655566	29232	684798
1997	658602	28627	687229
1998	663980	28961	692941
1999	672824	30027	702851
2000	675532	30980	706512
2001	678616	31840	710456
2002[1]	682980	32813	715793
% Change 1993-2002	5.7	22.3	6.4

[1]Excludes drivers holding only a Class 6 licence whose numbers generally range between 25 to 30 annually.

Between 1993 and 2002 active licenced drivers increased by 5.7% while suspended drivers increased by 22.3%.

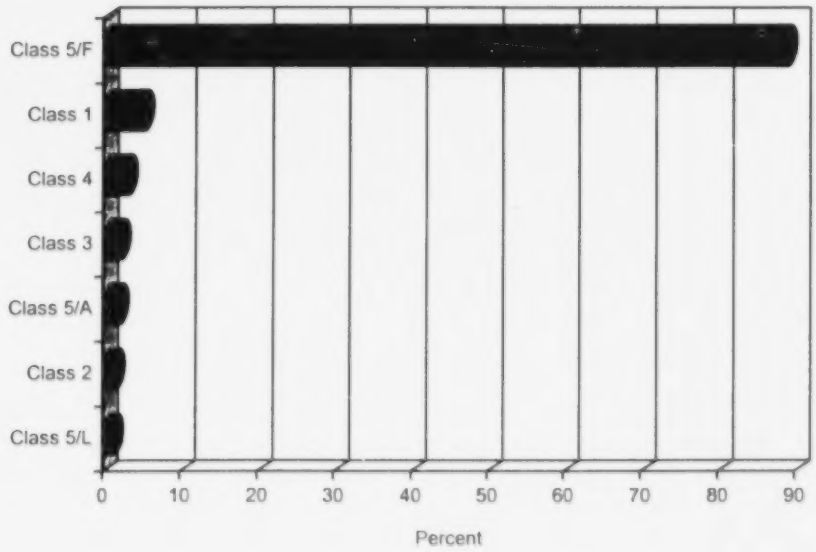
Class 1-5 Licenced Drivers
By Licence Class, Driver Status and Sex

Licence Class	Active Drivers				Suspended Drivers				Total	%
	Male	Female	S/Total	%	Male	Female	S/Total	%		
1.0	31035	1107	32142	4.7	973	14	987	3.0	33129	4.6
2.0	4990	1482	6472	0.9	128	21	149	0.4	6621	0.9
3.0	10473	273	10746	1.6	307	5	312	0.9	11058	1.6
4.0	13114	4309	17423	2.6	614	65	679	2.1	18102	2.5
5/A	3802	5770	9572	1.4	251	65	316	1.0	9888	1.4
5/F	305530	296025	601555	88.1	23273	7076	30349	92.5	631904	88.3
5/L	2597	2473	5070	0.7	15	6	21	0.1	5091	0.7
Total	371541	311439	682980	100.0	25561	7252	32813	100.0	715793	100.0

Manitoba Class 5 Driver's Licence Stages

5/A - Learner licence acquired before introduction of Graduated Driver Licencing
5/F - Full Class 5 licence
5/L - Learner licence under Graduated Driver Licencing

Distribution of Total Drivers,
by Licence Class



Active and Suspended Class 1-5 Male Drivers by Age Group and Licence Class

Age Group	Status	Licence Class							Total
		1.0	2.0	3.0	4.0	5/A	5/F	5/L	
16-17	Active	0	0	0	0	1364	8756	1814	11934
	Suspd[1]	0	0	0	0	17	186	5	208
	Subtotal	0	0	0	0	1381	8942	1819	12142
18-19	Active	87	2	15	48	717	11170	241	12280
	Suspd[1]	0	2	0	0	35	656	3	696
	Subtotal	87	4	15	48	752	11826	244	12976
20-24	Active	1122	53	284	712	663	26265	191	29290
	Suspd[1]	44	0	7	14	49	2209	0	2323
	Subtotal	1166	53	291	726	712	28474	191	31613
25-34	Active	5706	402	1155	3219	549	49552	204	60787
	Suspd[1]	189	13	37	105	62	3775	5	4186
	Subtotal	5895	415	1192	3324	611	53327	209	64973
35-44	Active	9014	1241	2610	4074	248	60316	95	77598
	Suspd[1]	243	42	71	186	38	4097	0	4677
	Subtotal	9257	1283	2681	4260	286	64413	95	82275
45-54	Active	8932	1700	3810	3480	129	56001	31	74083
	Suspd[1]	238	35	90	168	17	2902	0	3450
	Subtotal	9170	1735	3900	3648	146	58903	31	77533
55-64	Active	4813	1188	1990	1337	61	40772	17	50178
	Suspd[1]	164	10	54	94	7	1835	2	2166
	Subtotal	4977	1198	2044	1431	68	42607	19	52344
65-74	Active	1257	373	555	226	28	30689	2	33130
	Suspd[1]	72	15	32	29	10	1755	0	1913
	Subtotal	1329	388	587	255	38	32444	2	35043
75-84*	Active	102	31	51	18	26	18717	2	18947
	Suspd[1]	17	8	10	11	10	2634	0	2690
	Subtotal	119	39	61	29	36	21351	2	21637
85>*	Active	2	0	3	0	17	3292	0	3314
	Suspd[1]	6	3	6	7	6	3224	0	3252
	Subtotal	8	3	9	7	23	6516	0	6566
Total	Active	31035	4990	10473	13114	3802	305530	2597	371541
	Suspd[1]	973	128	307	614	251	23273	15	25561
	Grand Total	32008	5118	10780	13728	4053	328803	2612	397102

[1]Suspd = Suspended

Among males, the 35-44 age group accounted for the highest number of active and suspended drivers, followed by the 45-54 age group. Drivers aged 75 and older accounted for 23.2% of suspended drivers. The age groups 75-84 and 85> display a comparatively higher number of suspensions as drivers in these age groups typically represent drivers indefinitely suspended for medical reasons. As well, driving records are not regularly culled from the drivers' file.

Active and Suspended Class 1-5 Female Drivers by Age Group and Licence Class

Age Group	Status	Licence Class							Total
		1.0	2.0	3.0	4.0	5/A	5/F	5/L	
16-17	Active	0	0	0	0	1695	6889	1603	10187
	Suspd[1]	0	0	0	0	11	53	2	66
	Subtotal	0	0	0	0	1706	6942	1605	10253
18-19	Active	0	0	1	21	832	9291	155	10300
	Suspd[1]	0	0	0	0	10	106	2	118
	Subtotal	0	0	1	21	842	9397	157	10418
20-24	Active	30	8	12	376	1069	23662	205	25362
	Suspd[1]	2	0	0	2	8	338	0	350
	Subtotal	32	8	12	378	1077	24000	205	25712
25-34	Active	246	150	27	1451	1148	49929	273	53224
	Suspd[1]	2	0	0	15	8	722	0	747
	Subtotal	248	150	27	1466	1156	50651	273	53971
35-44	Active	402	511	42	1415	646	63939	148	67103
	Suspd[1]	7	8	0	18	12	990	0	1035
	Subtotal	409	519	42	1433	658	64929	148	68138
45-54	Active	309	543	99	811	242	60526	56	62586
	Suspd[1]	3	8	3	17	3	790	2	826
	Subtotal	312	551	102	828	245	61316	58	63412
55-64	Active	115	245	80	215	76	39965	22	40718
	Suspd[1]	0	3	2	7	0	561	0	573
	Subtotal	115	248	82	222	76	40526	22	41291
65-74	Active	5	25	10	20	37	25622	7	25726
	Suspd[1]	0	0	0	3	2	670	0	675
	Subtotal	5	25	10	23	39	26292	7	26401
75-84*	Active	0	0	2	0	21	14333	2	14358
	Suspd[1]	0	2	0	3	5	1375	0	1385
	Subtotal	0	2	2	3	26	15708	2	15743
85>*	Active	0	0	0	0	4	1869	2	1875
	Suspd[1]	0	0	0	0	6	1471	0	1477
	Subtotal	0	0	0	0	10	3340	2	3352
Total	Active	1107	1482	273	4309	5770	296025	2473	311439
	Suspd[1]	14	21	5	65	65	7076	6	7252
	Grand Total	1121	1503	278	4374	5835	303101	2479	318691

[1]Suspd = Suspended

Among females, the 35-44 age group accounted for the highest number of active and suspended drivers. However, only 1.5% of drivers in that age group were suspended versus 2.3% of drivers of all ages. Drivers aged 75 and older accounted for 39.5% of female suspended drivers. The age groups 75-84 and 85> display a comparatively higher number of suspensions as drivers in these age groups typically represent drivers indefinitely suspended for medical reasons. As well, since driving records are not regularly culled from the drivers' files some deceased drivers are included in the count until their records are removed from the data bank.

Class 6 Active Licenced Drivers
By Age Group, Sex and Driver Status

Age Group	Sex	Active Drivers	%
16-17	M	166	
	F	16	
	Total	182	0.4
18-19	M	332	
	F	27	
	Total	359	0.8
20-24	M	1370	
	F	134	
	Total	1504	3.2
25-34	M	5128	
	F	476	
	Total	5604	11.9
35-44	M	14119	
	F	1477	
	Total	15596	33.3
45-54	M	15433	
	F	1605	
	Total	17038	36.3
55-64	M	4429	
	F	411	
	Total	4840	10.3
65-74	M	1249	
	F	98	
	Total	1347	2.9
75-84 *	M	370	
	F	23	
	Total	393	0.8
85> *	M	41	
	F	1	
	Total	42	0.1
All Ages	M	42637	
	F	4268	
	Total	46905	100.0

Active drivers include the annual average of drivers on file with a driver licence expiry date in the future.

* The largest percentage of male motorcyclists occurs in the 45-54 (36.2%) and 35-44 (33.1%) age groups. The situation is similar for female motorcyclists with those aged 45-54 accounting for 37.6% and those aged 35-44 for 34.6%.

Note: Since the vast majority of Class 6 licence holders also possess Class 1 to 5 licences, the numbers in the above table have been included in the previous Class 1 to 5 totals.

Total Class 6 Active Licenced Drivers
1993 - 2002

Licencing Year	Active Drivers
1993	45164
1994	45407
1995	45866
1996	46033
1997	46184
1998	46448
1999	46993
2000	46931
2001	46784
2002	46905
% Change 1993-2002	3.9

Between 1993 and 2002 the number of licenced motorcyclists rose by 3.9% from 45,164 to 46,905.

Manitoba Class 6 Driver's Licence Stages

6/A - Learner licence acquired before introduction of Graduated Driver Licencing
6/F - Full Class 6 licence
6/L - Learner licence under Graduated Driver Licencing

Class 6 Active Licenced Drivers
By Licence Class, Driver Status and Sex

LicenceClass	Active Drivers			
	Male	Female	Total	%
6/A	1191	213	1404	3.0
6/F	40132	3792	43924	93.6
6/L	1314	263	1577	3.4
Total	42637	4268	46905	100.0

Full Class 6 licence holders accounted for 93.6% of all Man[illegible]a-licenced motorcyclists, with learners under the graduated driver licencing (GDL) program for a[illegible]r 3.4% and those [illegible]taining learner licences prior to GDL for 3.0%.

Active Class 6 Male Drivers by Age Group and Licence Class

Age Group	Licence Class			Total	% of Total
	6/A	6/F	6/L		
16-17	23	25	118	166	0.4
18-19	68	104	160	332	0.8
20-24	292	701	377	1370	3.2
25-34	476	4327	325	5128	12.0
35-44	202	13738	179	14119	33.1
45-54	93	15225	115	15433	36.2
55-64	28	4367	34	4429	10.4
65-74	7	1236	6	1249	2.9
75-84	2	368	0	370	0.9
85>	0	41	0	41	0.1
Total	1191	40132	1314	42637	100.0

The highest number of male new learners (i.e., under Graduated Driver Licencing) appears in the 20-24 (377 or 28.7%) age group and among those aged 25-34 (325 or 24.7%). Those who still have learner licences predating GDL (i.e., 6/A) tend to be older, with 67.8% over 24 versus 50.2% of those with learner licences acquired under GDL.

Active Class 6 Female Drivers by Age Group and Licence Class

Age Group	Licence Class			Total	% of Total
	6/A	6/F	6/L		
16-17	2	2	12	16	0.4
18-19	5	5	17	27	0.7
20-24	35	53	46	134	3.1
25-34	62	338	76	476	11.1
35-44	68	1334	75	1477	34.6
45-54	34	1537	34	1605	37.6
55-64	5	403	3	411	9.6
65-74	2	96	0	98	2.3
75-84	0	23	0	23	0.6
85>	0	1	0	1	-.-
Total	213	3792	263	4268	100.0

The highest number of female new learners (i.e., under Graduated Driver Licencing) appears in the 25-34 (76 or 28.9%) age group and among those aged 35-44 (75 or 28.5%). Unlike males, however, females with learner licences acquired under GDL tend to be older, with 80.3% of them over 24 versus 71.5% of those whose learner licences predate GDL.

Class Licence System Quick Reference Chart

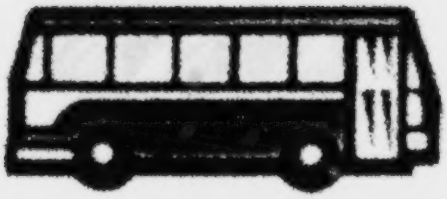
Licence Class	Description
1	Class 1 licence permits the holder to operate all motor vehicles (except motorcycles) or combination of vehicles, semi-trailers, trucks, buses, etc., including all vehicles in Classes 2, 3, 4, and 5.
2	Class 2 licence permits the holder to operate all vehicles except vehicles in Class 1 and 6.
3	Class 3 licence permits the holder to operate all motor vehicles except vehicles in Classes 1, 2, and 6.
4	Class 4 licence permits the holder to operate all motor vehicles except vehicles in Classes 1, 2, 3, and 6.
5	Class 5 licence permits the holder to operate a Class 5 motor vehicle and a Class 3 motor vehicle if it is registered as a farm truck.
6	Class 6 licence permits the holder to operate a motorcycle. Operation of vehicles in Classes 1 to 5 are prohibited, unless the Class 6 licence is held in conjunction with Class 1, 2, 3, 4 or 5 licence.
7	Class 7 licence permits the holder to drive as a learner within Classes 1 to 5, if shown on the licence, and accompanied by a licenced driver with at least 24 months driving experience in that class of vehicle. Class 7 licence may be used in conjunction with a valid motorcycle instruction permit.

Vehicle Classification Quick Reference Chart

Vehicle Class	Description
1	Semi-trailer trucks.
2	Buses having a seating capacity of over 24 passengers, while carrying passengers, and school buses having a seating capacity of over 36 passengers, while carrying passengers.
3	Trucks with more than two axles, including any combination of vehicles, or trucks with not more than two axles towing a vehicle with a registered gross vehicle weight (GVW) of more than 4,540 kg. but does not include a semi-trailer truck.
4	Taxis, ambulances, and any other emergency vehicles and buses having a seating capacity between 10 and 24 passengers, while carrying passengers, or school buses having a seating capacity between 10 and 36 passengers, while carrying passengers.
5	Passenger cars, a bus while not carrying passengers, a truck with not more than two axles, and any combination of vehicles consisting of a truck with not more than two axles and a towed vehicle with a registered gross vehicle weight (GVW) of not more than 4,540 kg.
6	Motorcycles.

Section 3

Vehicle Registrations



By Non-Commercial Vehicle Class
2002

Vehicle Class[1]	Net Total	%
Passenger	520,200	67.8
Antique	75	-.-
Motorcycle/Moped	6,361	0.8
Truck	117,875	15.4
Farm Truck	45,651	5.9
Snow Vehicle	23	-.-
Trailer	77,544	10.1
Tractor (Other than Farm-type)	83	-.-
Total Vehicles Registered	767,812	100.0
Off-Road Vehicles (*The Off-Road Vehicles Act*)		
Total ORV Registered	30,918	

By Commercial Vehicle Class
2002

Vehicle Class[1]	Net Total	%
Commercial Truck	16,473	27.2
Public Service Vehicle Truck	6,163	10.2
Dealer and Repairer	4,953	8.2
Taxi/Livery	823	1.4
Public Service Vehicle Bus	73	0.1
Commercial Trailer	31,984	52.9
Public Service Vehicle Trailer	47	-.-
Total Vehicles Registered	60,516	100.0

[1]For definition of these motor vehicle classes refer to the glossary.

The vehicle registration figures for 2002 cannot be compared with figures appearing before 1996 since the reporting threshold excludes lapsed, cancelled, and suspended vehicle registrations and includes transfers and short term policies.

The method of counting motorcycle registrations is Transport Canada's: a motorcycle is not used for the full year, therefore it is counted as 0.5.

Summary
1997 – 2002

Registration Class	1997	1998	1999	2000	2001	2002	% Change 2001-2002
Non-Commercial Vehicle Class							
Passenger	492,729	488,974	496,295	502,987	511,300	520,200	1.7
Antique	37	54	58	68	73	75	[2]
Motorcycle/Moped	4,435	5,128	4,893	5,217	5,694	6,361	11.7
Truck	110,381	113,777	116,054	115,740	116,702	117,875	1.0
Farm Truck	51,041	48,725	47,912	46,726	46,263	45,651	-1.3
Snow Vehicle	29	26	27	25	22	23	[2]
Trailer	70,535	69,491	72,175	73,334	76,633	77,544	1.2
Tractor (non-farm)	85	84	78	73	80	83	[2]
Subtotal	729,272	726,259	737,492	744,170	756,767	767,812	1.5
Commercial Vehicle Class							
Truck	15,588	16,002	16,249	16,196	16,372	16,473	0.6
PSV – Truck	2,964	3,289	3,646	3,776	5,686	6,163	8.4
Dealer/Repairer	3,977	4,142	4,538	4,814	5,015	4,953	-1.2
Taxi/Livery	1,077	803	763	833	840	823	-2.0
PSV-Bus	20	19	64	71	71	73	[2]
Trailers[1]	29,383	25,628	29,062	31,134	34,017	31,984	-6.0
PSV-Trailers	14	23	26	30	35	47	[2]
Subtotal	53,023	49,906	54,348	56,854	62,036	60,516	-2.4
Total Registrations	**782,295**	**776,165**	**791,840**	**801,024**	**818,803**	**828,328**	**1.2**
Off-Road Vehicles							
Total	24,823	24,214	25,170	29,291	29,288	30,918	5.6
Off-Road Vehicle Dealer Plates							
Total	249	232	236	260	238	229	-3.8

[1]Commercial trailers include semi-trailers.

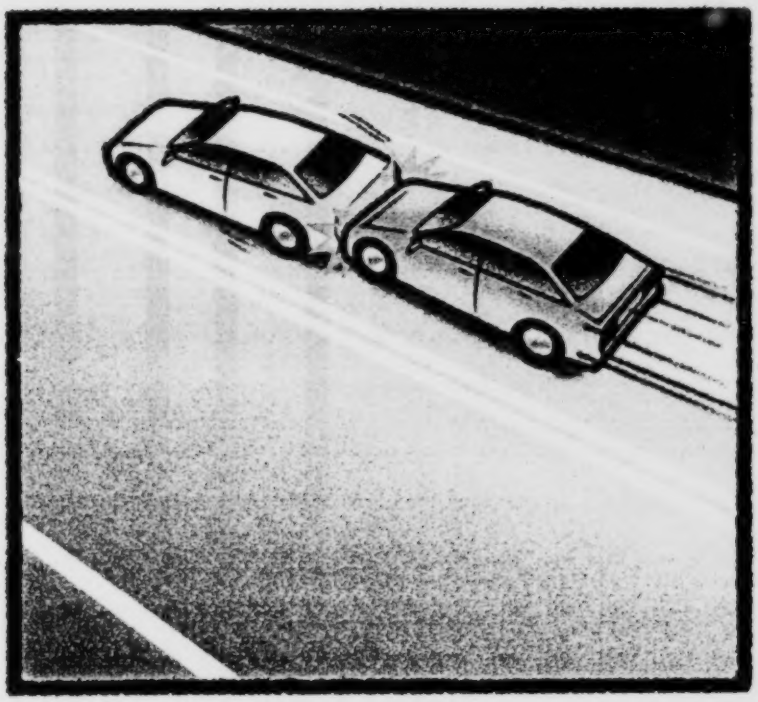
[2]Numbers too low to permit valid comparison

Numbers for each of these years cannot be compared with figures appearing in earlier annual reports since they exclude lapsed, cancelled, and suspended vehicle registrations.

Total vehicle registrations (excluding off-road vehicles) increased by 5.9% between 1997 and 2002, from 782,295 to 828,328. Non-commercial vehicle registrations rose by 5.3%, from 729,272 to 767,812 while commercial vehicle registrations increased by 14.1%, from 53,023 to 60,516.

Section 4

Traffic Collisions



INTRODUCTION TO SECTION 4

This section begins with a 10-year summary highlighting the four key elements of traffic collisions:

- the number of collisions;
- the number of victims killed or injured;
- the number of vehicles involved in the collisions; and
- the number of drivers involved.

Crashes are defined by three accident severity types: fatal, injury and property damage. A fatal traffic accident is a crash where an injured victim dies within 30 days. A motor vehicle collision resulting in injury but not death is an injury collision. Property damage crashes in excess of $1,000 combined damage must also be reported to a law enforcement agency.

The elements examined in this section include:

- month, day, time of crash;
- environmental (weather, road surface); and
- provincial locations (cities/towns).

It is important to note that the number of fatal or injured collisions does not indicate the number of fatal or injured victims as each collision can result in multiple victims.

The term, "collision type", refers to the object struck by a motor vehicle (for example, a pedestrian, another motor vehicle, or a fixed object) or to what happened to the vehicle in a single-vehicle mishap (for example, overturned, ran off road). The term, "collision severity", refers to fatal, injury, and property damage collisions.

Urban and rural locations are identified to indicate significant regional variations in collision severity and collision type.

"Accident configuration" briefly describes the action taken by one vehicle relative to another when the accident occurred.

Ten Year Summary
1993– 2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total Collisions	29435	29744	32398	29089	27133	27124	28667	30973	30999	31983
Fatal	106	98	108	79	101	109	99	92	82	99
Injury	10906	9706	8783	7509	6698	6879	6959	6931	6656	6953
Property Damage	18423	19940	23507	21501	20334	20136	21609	23950	24261	24931
Total Victims	15751	13951	12266	10560	9267	9652	9810	9596	9096	9642
Killed	134	119	128	93	119	121	113	111	94	109
Injured	15617	13832	12138	10467	9148	9531	9697	9485	9002	9533
Total Vehicles Involved	51362	51099	55392	49712	45959	46005	48457	52810	51123	52829
Fatal	161	161	188	115	147	170	157	140	138	156
Injury	20573	18140	16120	13428	11955	12371	12543	12362	11770	12384
Property Damage	30628	32798	39084	36169	33857	33464	35757	40308	39215	40289
Total Drivers Involved	47260	46651	50319	46020	42324	42578	44862	48859	46324	48082
Fatal	150	152	171	110	142	164	151	136	127	149
Injury	19852	17421	15530	12891	11487	11908	12096	11943	11377	11957
Property Damage	27258	29078	34618	33019	30695	30506	32615	36780	34820	35976

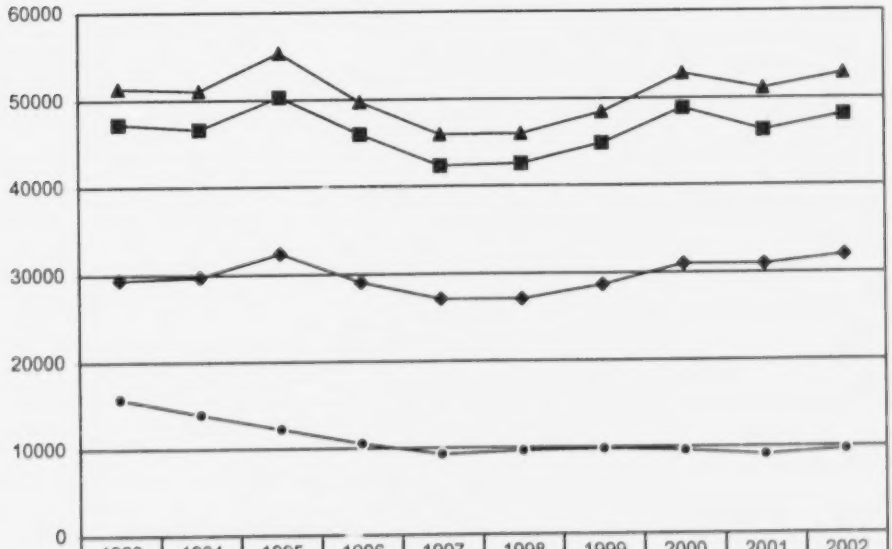
Total accidents increased by 3.2%, from 30,999 in 2001 to 31,983 in 2002. Fatal accidents increased from 82 to 99, a variance of 20.7%. Injury (6,656 to 6,953) and property damage (24,261 to 24,931) collisions increased by 4.5% and 2.8% respectively.

The overall number of collision victims increased by 6.0% from 9,096 in 2001 to 9,642 in 2002. The number of victims killed increased by 16.0% from 94 in 2001 to 109 in 2002. Victims injured increased by 5.9% from 9,002 in 2001 to 9,533 in 2002.

There were a total of 52,829 vehicles involved in traffic collisions in 2002, 3.3% more than the 51,123 recorded in 2001. The number of vehicles involved in fatal traffic accidents increased by 13.0% from 138 in 2001 to 156 in 2002. Vehicles involved in injury collisions increased by 5.2% from 11,770 in 2001 to 12,384 in 2002. Property damage vehicle involvement increased by 2.7% from 39,215 in 2001 to 40,289 in 2002.

The overall number of drivers involved in traffic collisions increased by 3.8% from 46,324 in 2001 to 48,082 in 2002. The number of drivers involved in fatal collisions rose by 17.3% from 127 in 2001 to 149 in 2002. Drivers involved in injury collisions increased by 5.1% from 11,377 in 2001 to 11,957 in 2002. Drivers involved in property damage collisions increased from 34,820 in 2001 to 35,976 in 2002, a 3.3% increase.

Ten Year Summary
1993 – 2002



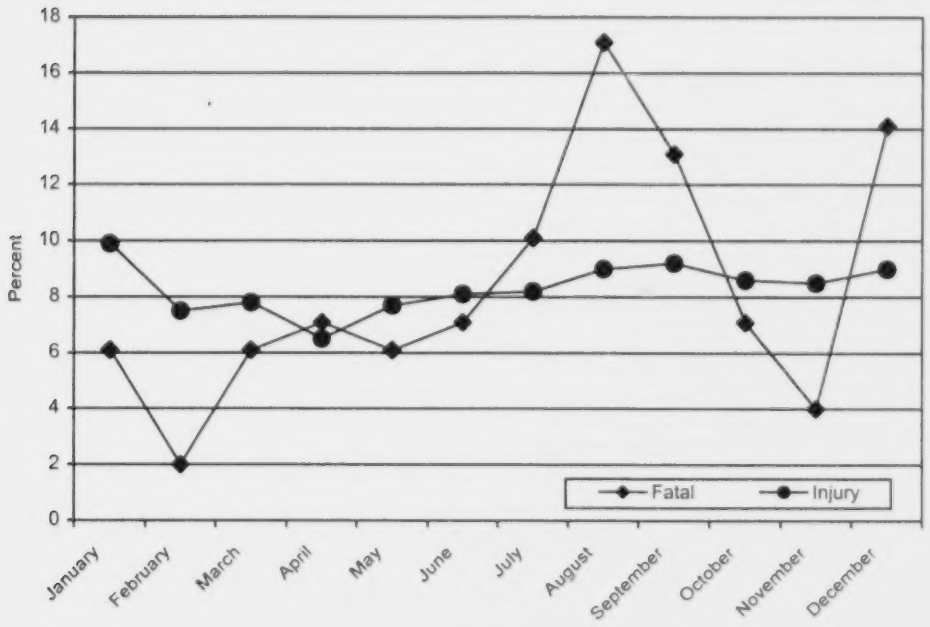
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Collisions	29435	29744	32398	29089	27133	27124	28667	30973	30999	31983
Victims	15751	13951	12266	10560	9267	9652	9810	9596	9096	9642
Vehicles	51362	51099	55392	49712	45959	46005	48457	52810	51123	52829
Drivers	47260	46651	50319	46020	42324	42578	44862	48859	46324	48082

By Month of Occurrence and Collision Type
2002

Month	Collision Type			Total	%
	Fatal	Injury	Property Damage		
January	6	686	2895	3587	11.2
February	2	519	1947	2468	7.7
March	6	542	2099	2647	8.3
April	7	455	1603	2065	6.4
May	6	535	1686	2227	6.9
June	7	565	1850	2422	7.6
July	10	569	1785	2364	7.4
August	17	628	1903	2548	8.0
September	13	636	1867	2516	7.9
October	7	601	2241	2849	8.9
November	4	592	2628	3224	10.1
December	14	625	2427	3066	9.6
Total	99	6953	24931	31983	100.0

January, November and December accounted for 30.9% of the total collisions occurring in 2002. August had the highest number of fatal collisions (17), followed by December (14). January recorded the highest number of injury (686) and property damage (2895) collisions. The greater variability shown in the graph below for fatal collisions reflects the tendency for smaller numbers to change more dramatically percentagewise than larger numbers.

Comparison of Fatal and Injury Collisions
by Month of Occurrence
2002

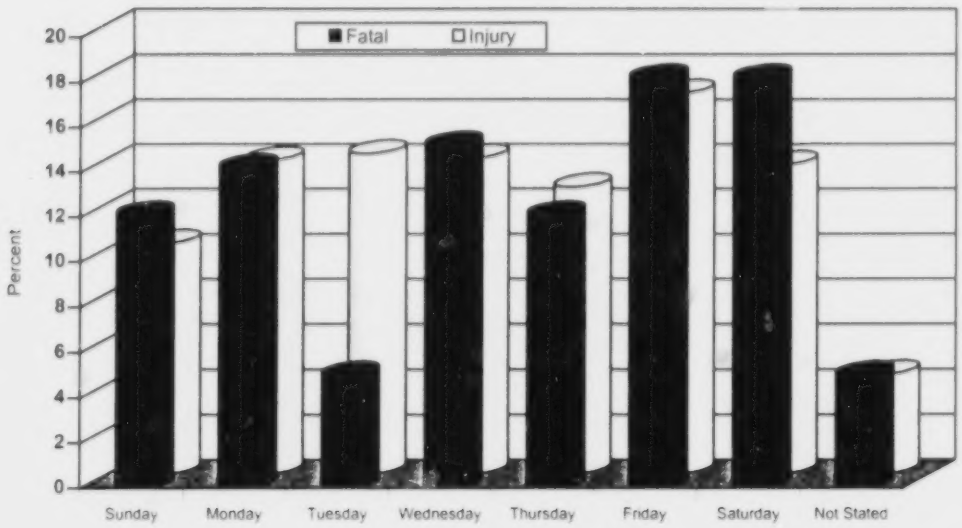


By Day of Occurrence and Collision Type
2002

Day	Collision Type			Total	%
	Fatal	Injury	Property Damage		
Sunday	12	712	2565	3289	10.3
Monday	14	959	3166	4139	12.9
Tuesday	5	990	3217	4212	13.2
Wednesday	15	974	3298	4287	13.4
Thursday	12	887	3360	4259	13.3
Friday	18	1173	4186	5377	16.8
Saturday	18	954	3591	4563	14.3
Not Stated	5	304	1548	1857	5.8
Total	99	6953	24931	31983	100.0

Overall, more accidents occurred on Friday (16.8%) than on any other day of the week. Collisions that resulted in deaths occurred more frequently on Fridays and Saturdays (36.4%), while fewest fatal collisions took place on Tuesdays, at 5.0%. Injury collisions happened most often on Fridays and Tuesdays (16.9% and 14.2%), while these crashes occurred least often on Sundays, at 10.2%.

Fatal and Injury Collisions
by Day of Occurrence
2002

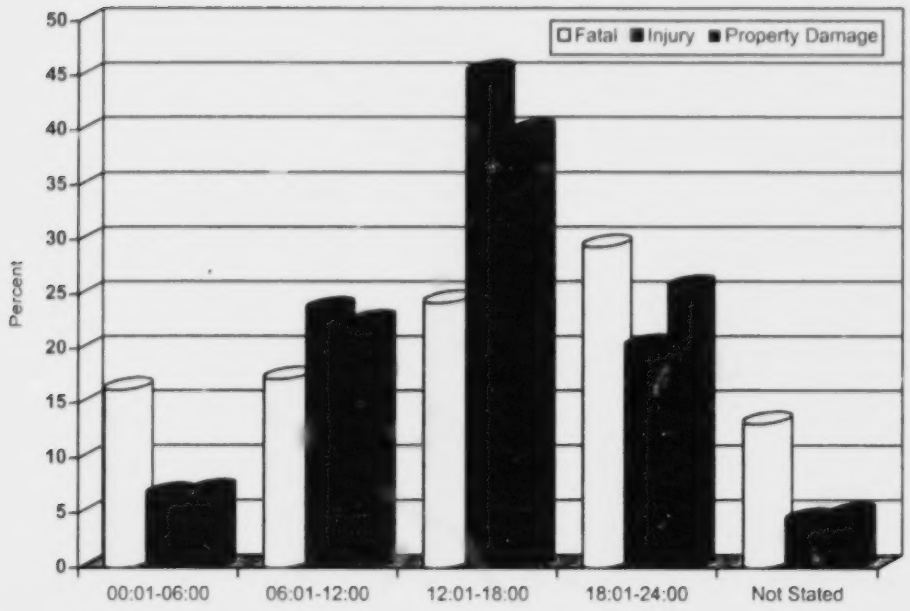


By Time of Occurrence and Collision Type
2002

Time	Collision Type			Total	%
	Fatal	Injury	Property Damage		
00:01 - 06:00	16	457	1751	2224	7.0
06:01 -12:00	17	1644	5597	7258	22.7
12:01 - 18:00	24	3149	9946	13119	41.0
18:01 - 24:00	29	1404	6409	7842	24.5
Not Stated	13	299	1228	1540	4.8
Total	99	6953	24931	31983	100.0

Overall, the highest incidence of traffic collisions (41.0%) occurred between 12:01 - 18:00 hours. Collisions were nearly six times more likely to occur in this time frame than the early morning. The 18:00 to 24:00 time frame accounted for 29.3% of fatal collisions while the 12:00 - 18:00 time frame accounted for 45.3% of injury collisions. Fatal and injury collisions occurred least often between midnight and 06:00.

Comparison of Traffic Collisions
by Time of Occurrence and Collision Type
2002



By Collision Type and Urban/Rural Location
2002

Collision Type	Location												%
	Urban				Rural				Provincial Total				
	Fatal	Injury	Property Damage	Total	Fatal	Injury	Property Damage	Total	Fatal	Injury	Property Damage	Total	
Pedestrian	11	411	5	427	3	10	0	13	14	421	5	440	1.4
Motor Vehicle	6	4373	16745	21124	31	419	949	1399	37	4792	17694	22523	70.4
Train	1	5	8	14	2	6	1	9	3	11	9	23	0.1
Motorcycle	2	86	65	153	4	31	14	49	6	117	79	202	0.6
Animal Drawn[1]	0	0	0	0	0	0	1	1	0	0	1	1	-.-
Bicycle	0	232	16	248	1	8	2	11	1	240	18	259	0.8
Animal	0	14	196	210	2	137	3026	3165	2	151	3222	3375	10.6
Fixed Object	3	292	1823	2118	3	75	332	410	6	367	2155	2528	7.9
Other Object	0	18	86	104	4	10	89	103	4	28	175	207	0.6
Overturned	0	9	15	24	1	69	66	136	1	78	81	160	0.5
Ran Off Roadway	1	79	191	271	24	661	1120	1805	25	740	1311	2076	6.5
Other Non Collision	0	1	44	45	0	7	137	144	0	8	181	189	0.6
Total	24	5520	19194	24738	75	1433	5737	7245	99	6953	24931	31983	100.0

[1]Vehicle pulled by animal

In urban areas, the primary collision type was "motor vehicle to motor vehicle" which accounted for 85.4% of total reportable collisions, while in rural areas, the primary collision type was "motor vehicle to animal" at 43.7%.

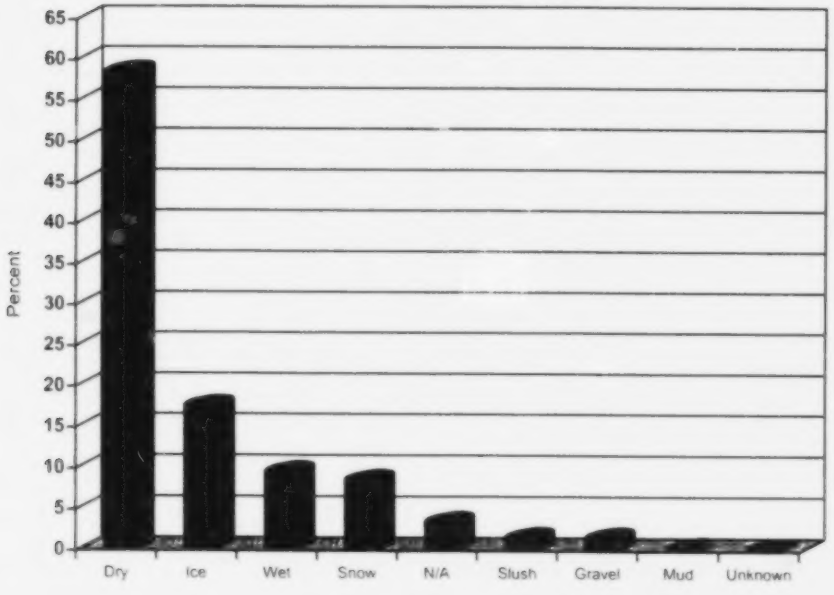
Fatal collisions occurred three times as often on rural roadways than in urban areas. In urban areas, "pedestrian" and "motor vehicle" were the primary fatal collision types, whereas in rural areas, "motor vehicle" and "ran off roadway" were the most frequently identified fatal collision types.

By Road Surface Condition and Collision Type
2002

Road Surface Condition	Collision Type			Total	%
	Fatal	Injury	Property Damage		
Dry	61	4175	14432	18668	58.4
Wet	8	821	2174	3003	9.4
Mud	1	16	37	54	0.2
Snow	10	456	2223	2689	8.4
Ice	13	1086	4461	5560	17.4
Slush	1	126	336	463	1.4
Loose Sand/Gravel/Dirt	4	154	294	452	1.4
Fresh Oil	0	0	1	1	-.-
Not Applicable	1	117	951	1069	3.3
Other	0	1	2	3	-.-
Unknown	0	1	20	21	0.1
Total	99	6953	24931	31983	100.0

Of the total traffic collisions, 58.4% occurred under "dry" road surface conditions. Ice, wet and snow-covered road surfaces accounted for 31.3% of fatal collisions, 34.0% of injury collisions, and 35.5% of property damage collisions.

Distribution of Total Collisions
by Road Surface Condition
2002

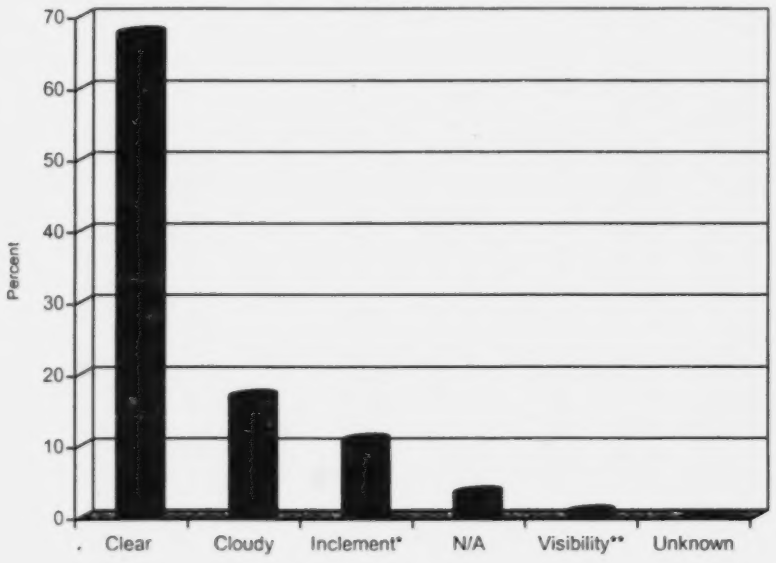


By Weather Condition and Collision Type
2002

Weather Condition	Collision Type			Total	%
	Fatal	Injury	Property Damage		
Clear	59	4693	16897	21649	67.7
Cloudy	19	1251	4168	5438	17.0
Raining	4	286	757	1047	3.3
Snowing	8	408	1545	1961	6.1
Fog or Mist	1	51	179	231	0.7
Smoke or Dust	0	4	22	26	0.1
Freezing Rain/Sleet/Hail	2	48	130	180	0.6
Drifting Snow	1	32	113	146	0.4
Strong Winds	2	42	108	152	0.5
Not Applicable	3	133	971	1107	3.5
Unknown	0	5	40	45	0.1
Other	0	0	1	1	-.-
Total	99	6953	24931	31983	100.0

"Clear" weather conditions accounted for 67.7% of total traffic collisions and 59.6% of fatal traffic collisions. "Cloudy", "raining", and "snowing" accounted for 31.3% of fatal collisions, 28.0% of injury collisions, and 26.0% of property damage collisions.

Distribution of Total Collisions
by Weather Condition
2002



*Inclement weather includes raining, snowing, freezing rain/sleet/hail, drifting snow and strong winds. **Visibility weather conditions include fog/mist and smoke/dust.

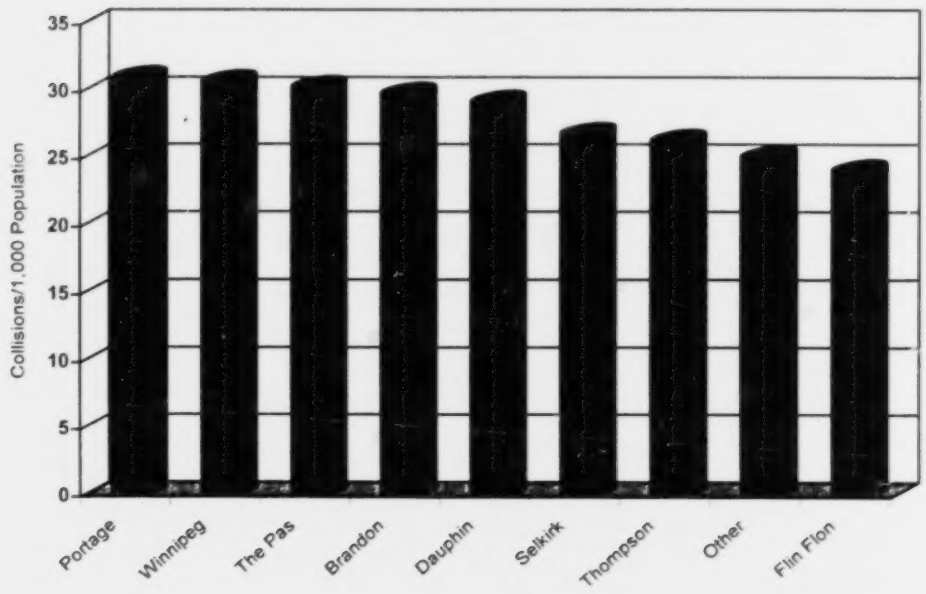
By Provincial Location and Collision Type
2002

Location	Collision Type			Total	%	Collisions /1,000 Population[1]
	Fatal	Injury	Property Damage			
Winnipeg	20	4739	14214	18973	59.3	30.6
Brandon	1	181	996	1178	3.7	29.7
Portage la Prairie	0	61	341	402	1.3	30.9
Flin Flon	0	15	129	144	0.4	24.0
Dauphin	0	34	201	235	0.7	29.1
Thompson	0	32	315	347	1.1	26.2
The Pas	0	17	158	175	0.5	30.2
Selkirk	0	38	222	260	0.8	26.7
Other – Urban	3	403	2618	3024	9.5	25.0
Other – Rural	75	1433	5737	7245	22.7	
Total	99	6953	24931	31983	100.0	28.6

[1]Based on 2001 rounded-up census statistics from Statistics Canada.

Of the total traffic collisions, 59.3% occurred within the City of Winnipeg, while 22.7% of the total collisions occurred in rural areas. However, rural roadway collisions accounted for 75.8% of total fatal collisions.

Distribution of Total Collisions
by Provincial Location /1,000 Population
2002



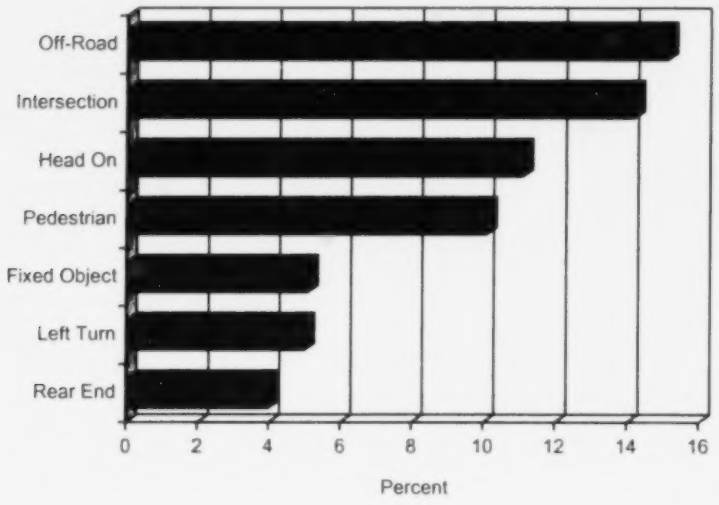
By Accident Configuration and Collision Type
2002

Configuration	Collision Type			Total	%
	Fatal	Injury	Property Damage		
Rear End	4	2053	4220	6277	19.6
Head On	11	94	202	307	1.0
Side Swipe	0	54	358	412	1.3
Side Swipe	0	129	1316	1445	4.5
Overtaking	0	61	411	472	1.5
Right Turn	1	22	126	149	0.5
Right Turn	0	19	101	120	0.4
Left Turn	0	95	204	299	0.9
Left Turn	1	39	174	214	0.7
Left Turn	4	391	956	1351	4.2
Intersection 90°	14	1255	2820	4089	12.8
Off-Road Right	8	390	753	1151	3.6
Off-Road Left	7	320	505	832	2.6
Fixed Object	5	240	1391	1636	5.1
Parking	0	33	1468	1501	4.7
Pedestrian	10	365	11	386	1.2
Other[1]	34	1393	9915	11342	35.4
Total	99	6953	24931	31983	100.0

[1] Accidents with two or more vehicles involved or more than one collision configuration.

"Intersections" accounted for the largest percentage of fatal collisions by accident configuration (14.2%) followed by "head on" (11.1%). "Rear end" collisions accounted for the largest percentage of injury collisions (29.5%) followed by "intersection" (18.0%). The situation was much the same for property damage collisions, with "rear end" collisions accounting for 16.9% and "intersection" for 11.3%.

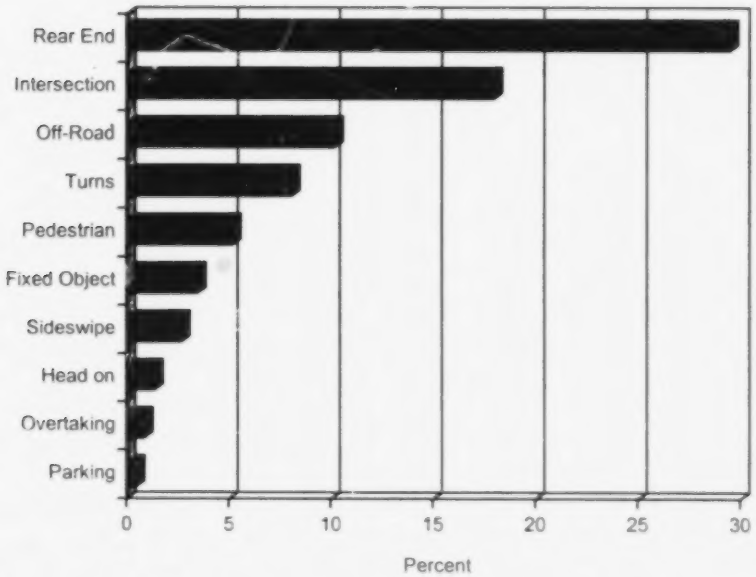
Distribution of Fatal Collisions by Accident Configuration 2002



Other category excluded, configuration describes collisions involving more than two vehicles/more than one configuration.

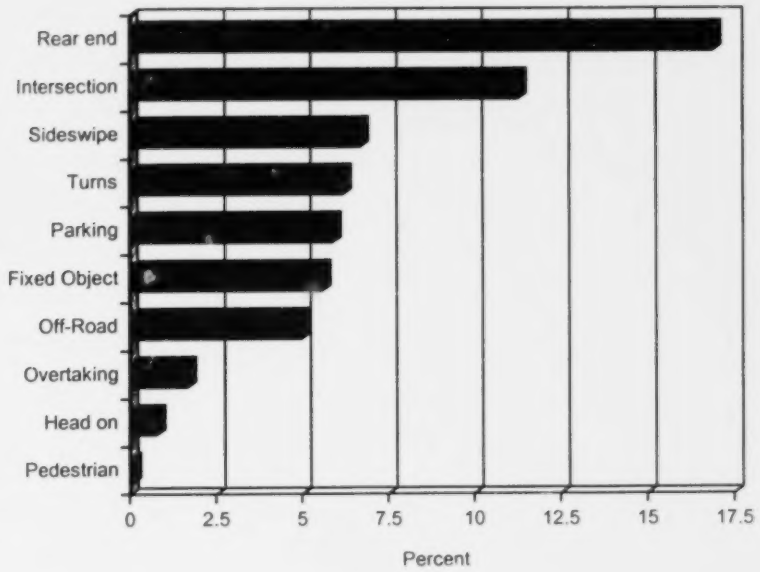
Of all fatal collisions, 29.3% occurred in "off-road" and "intersection 90^{0}" configurations. "Off-road" configurations refer to cases where either a single vehicle entered the right ditch or crossed the road and entered the left ditch.

Distribution of Injury Collisions by Accident Configuration 2002



"Rear-end" and "intersection 90^{0}" configurations account for 47.6% of injury collisions.

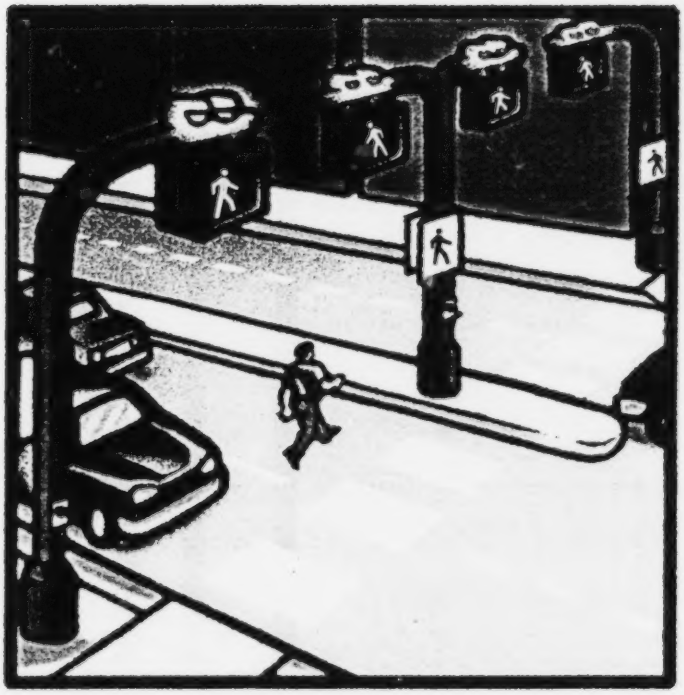
Distribution of Property Damage Collisions by Accident Configuration
2002



"Rear-end" and "intersection 90^{0}" configurations account for 28.2% of property damage collisions.

Section 5

Collision Victims



INTRODUCTION TO SECTION 5

This section deals with victims killed and injured as a result of vehicle crashes. "Killed" refers to those individuals who die within 30 days of the crash.

There are four types of non-fatal injured victims:

- minimal - required no hospital treatment;
- minor - treated and released;
- major - victim was admitted to hospital; and
- non-specified injury.

The elements examined in this section include:

- month, day, time of crash;
- age group and gender;
- road user class;
- collision type and configuration; and
- safety equipment usage.

"Accident configuration" indicates the number of individuals killed and injured while the vehicles were involved in particular manoeuvres (such as turning left, approaching too close - rear end, side swipe) or approaches (such as intersection). The section also indicates the degree to which vehicle defects contributed to death or injury.

The final table of this section refers to safety equipment usage for all vehicle occupants involved in fatal collisions. At this time, no record is kept of the degree to which safety equipment prevented a vehicle user from becoming a victim since only victims are recorded.

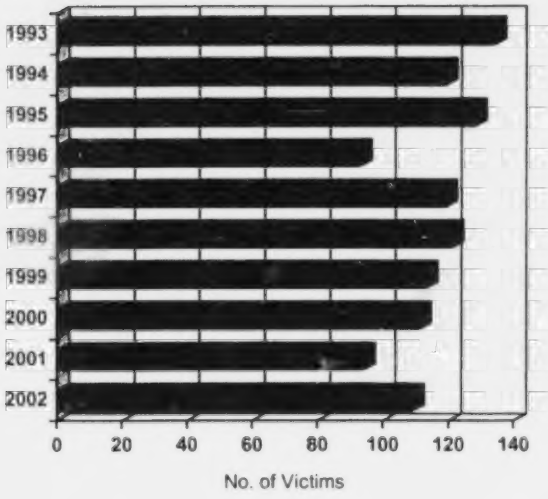
Ten Year Summary
1993 – 2002

Year	Injury Type		Total
	Killed	Injured	
1993	134	15617	15751
1994	119	13832	13951
1995	128	12138	12266
1996	93	10467	10560
1997	119	9148	9267
1998	121	9531	9652
1999	113	9697	9810
2000	111	9485	9596
2001	94	9002	9096
2002	109	9533	9642

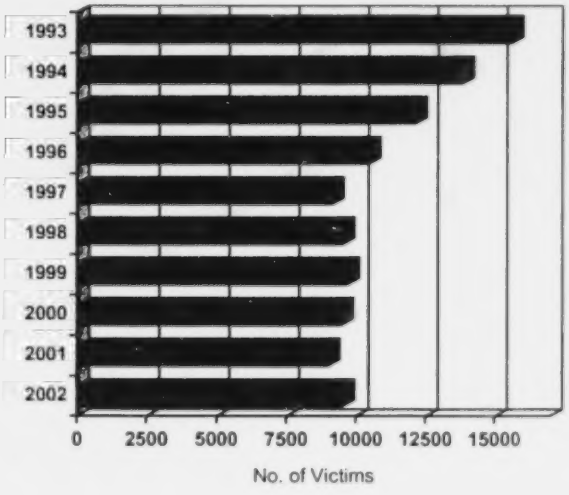
The total number of people killed and injured in traffic collisions increased by 6.0% between 2001 and 2002 (9096 to 9642). Fatalities rose from 94 to 109, an increase of 16.0%. Injured victims increased by 5.9% between 2001 and 2002 (9002 to 9533). On average 26 people were injured each day.

Comparison of Collision Victims
Ten Year Summary
1993 – 2002

Killed



Injured

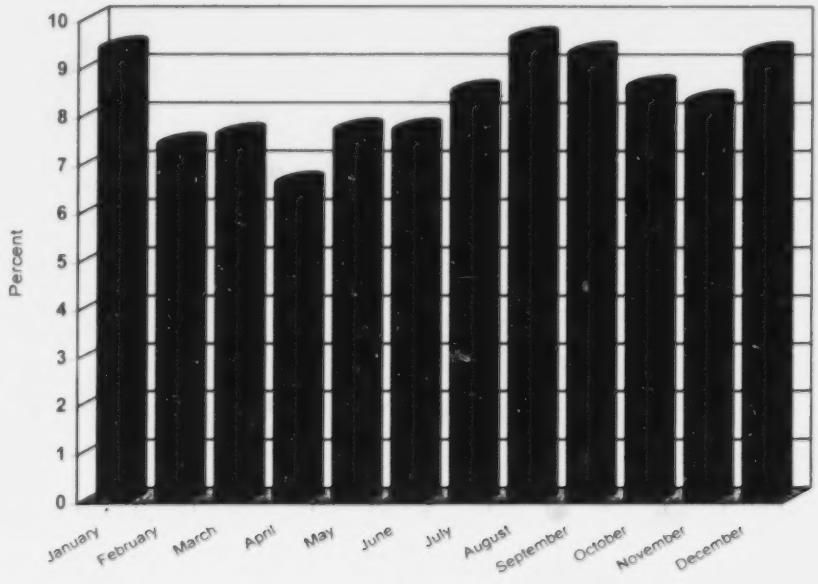


By Month of Occurrence and Injury Type
2002

Month	Injury Type		Total	%
	Killed	Injured		
January	7	900	907	9.4
February	2	710	712	7.4
March	6	726	732	7.6
April	10	626	636	6.6
May	7	737	744	7.7
June	7	734	741	7.7
July	10	808	818	8.5
August	18	905	923	9.6
September	15	884	899	9.3
October	7	817	824	8.6
November	4	801	805	8.3
December	16	885	901	9.3
Total	109	9533	9642	100.0

August accounted for the highest percentage of fatalities (16.5% or 18) while February recorded the lowest (1.8% or 2). The months of highest injury occurrence were January, August and December which, together accounted for 28.2% of the total.

Distribution of Total Collision Victims
By Month of Occurrence
2002

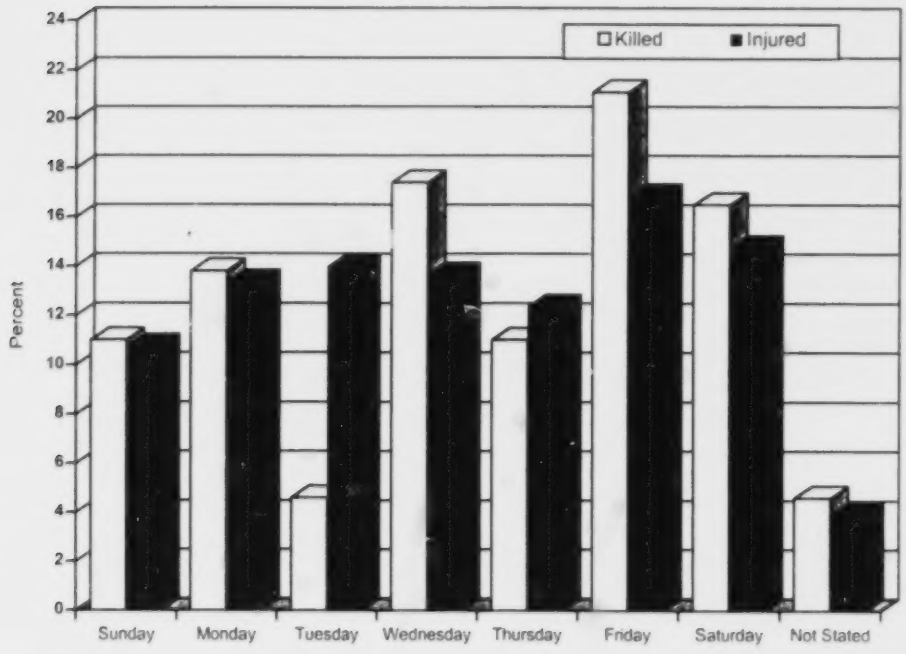


By Day of Occurrence and Injury Type
2002

Day	Injury Type		Total	%
	Killed	Injured		
Sunday	12	1030	1042	10.8
Monday	15	1279	1294	13.4
Tuesday	5	1335	1340	13.9
Wednesday	19	1304	1323	13.7
Thursday	12	1182	1194	12.4
Friday	23	1608	1631	16.9
Saturday	18	1410	1428	14.8
Not Stated	5	385	390	4.1
Total	109	9533	9642	100.0

Fridays accounted for the highest percentage of fatalities (21.1% or 23) while Tuesdays recorded the lowest (4.6% or 5). Injuries happened most often on Fridays and Saturdays (16.9% and 14.8% respectively), and least often on Sundays, at 10.8%.

Comparison of Collision Victims
by Day of Occurrence and Injury Type
2002

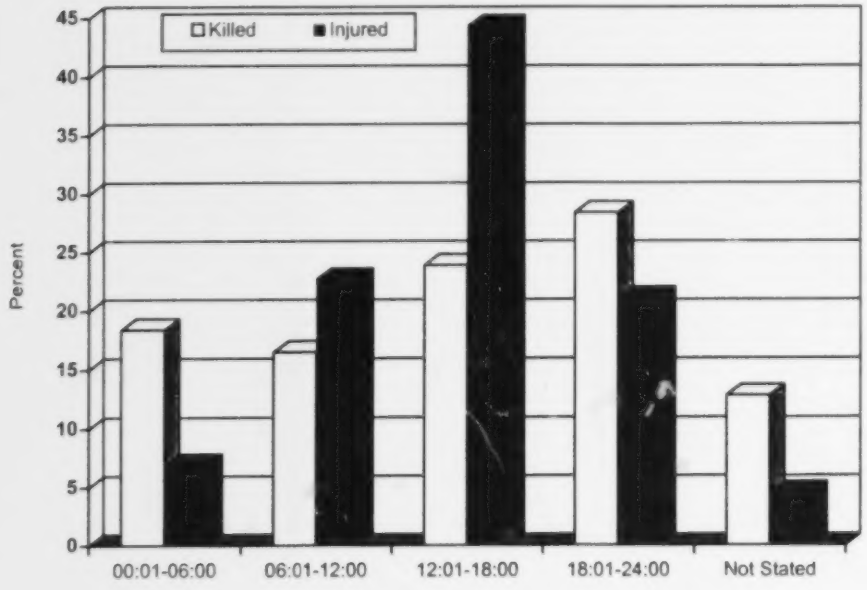


By Time of Occurrence and Injury Type
2002

Time	Injury Type		Total	%
	Killed	Injured		
00:01 - 06:00	20	669	689	7.1
06:01 - 12:00	18	2172	2190	22.7
12:01 - 18:00	26	4234	4260	44.2
18:01 - 24:00	31	2021	2052	21.3
Not Stated	14	437	451	4.7
Total	109	9533	9642	100.0

The highest incidence of casualties (44.2%) occurred within the time frame of 12:01 – 18:00 hours. More than half of the fatally injured victims (57 or 52.3%) were killed between 12 noon and 12 midnight.

Comparison of Collision Victims
by Time of Occurrence and Injury Type
2002

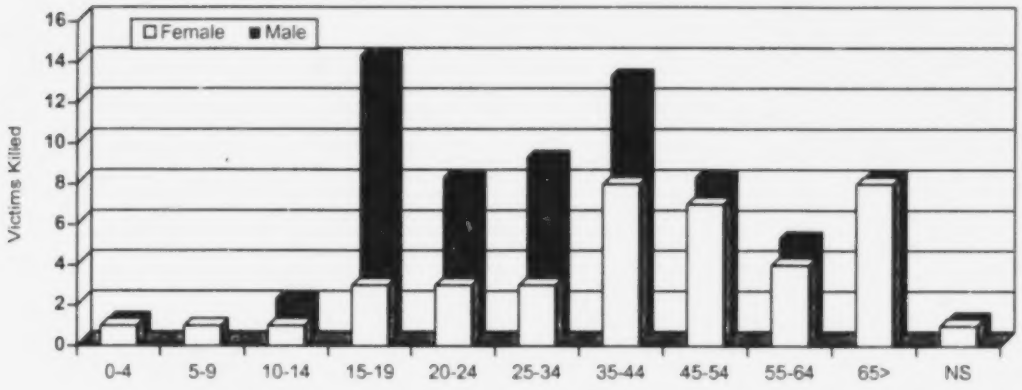


By Age Group, Injury Type, and Sex
2002

Age Group	Injury Type								Grand Total	Victims /1,000 Population[1]
	Killed				Injured					
	Male	Female	N.S.[2]	Total	Male	Female	N.S.[2]	Total		
0-4	1	1	0	2	67	52	0	119	121	1.7
5-9	0	1	0	1	106	95	0	201	202	2.5
10-14	2	1	0	3	122	151	0	273	276	3.3
15-19	14	3	0	17	604	688	0	1292	1309	16.3
20-24	8	3	0	11	516	546	0	1062	1073	14.7
25-34	9	3	0	12	686	797	0	1483	1495	10.4
35-44	13	8	0	21	675	846	0	1521	1542	8.7
45-54	8	7	0	15	533	665	0	1198	1213	7.8
55-64	5	4	0	9	276	316	0	592	601	6.0
65 >	8	8	0	16	300	314	0	614	630	4.0
N.S.[2]	1	1	0	2	562	615	1	1178	1180	
Total	69	40	0	109	4447	5085	1	9533	9642	8.6

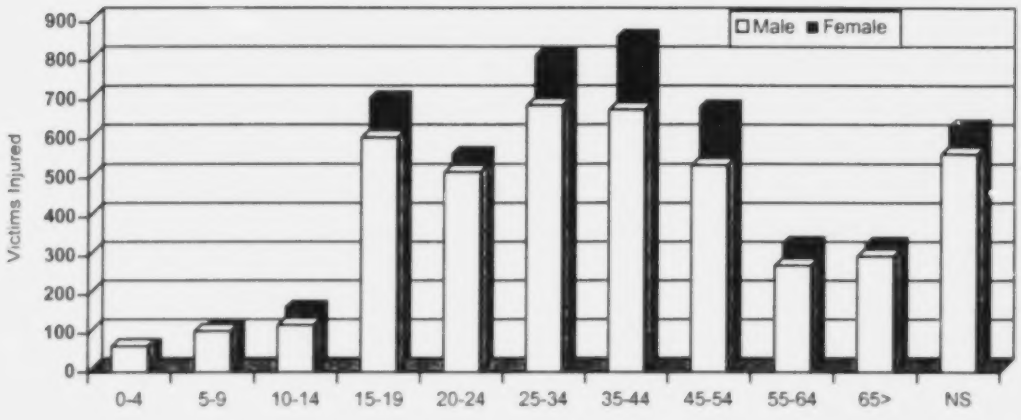
[1]Based on 2001 rounded-up census statistics from Statistics Canada.
[2]Not stated.

Comparison of Collision Victims Killed by Age Group and Sex
2002



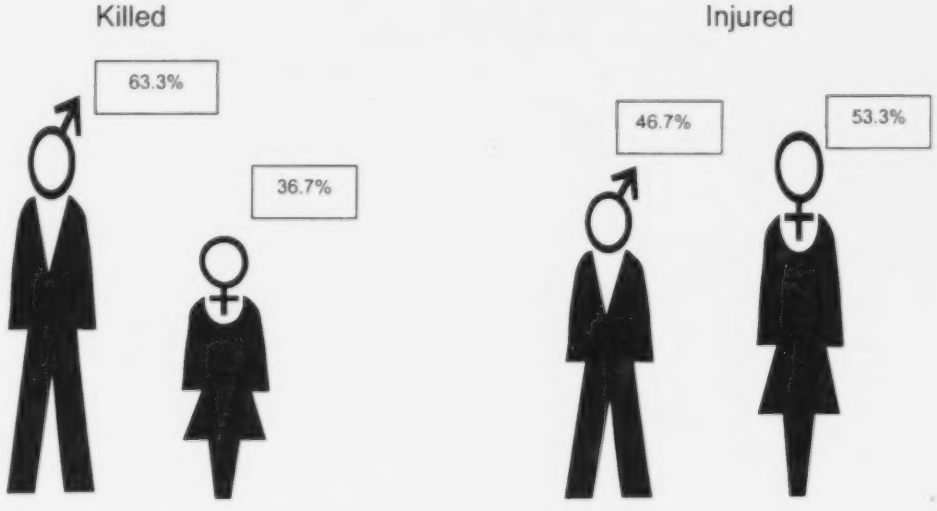
Male victims made up 63.3% (69) of all fatally injured victims, while females made up 36.7% (40). Among male age groups, those aged 15-19 incurred the largest number of fatalities (14 or 20.3%) followed by those aged 35-44 (13 or 18.8%). Among females, the age groups with the highest number killed were those 65 years or older and 35-44, each accounting for 8 or 20.0%.

Comparison of Collision Victims Injured by Age Group and Sex 2002



The number of female victims injured in all age groups is greater than for male victims except for the age groups 0-4 and 5-9 years of age. Of all injured victims, 53.3% were female and 46.7% were male.

Comparison of Total Collision Victims by Injury Type and Sex 2002



Males are 1.7 times as likely to be fatally injured in collisions than are females.

Total Collision Victims Killed by Road User Class and Age Group 2002

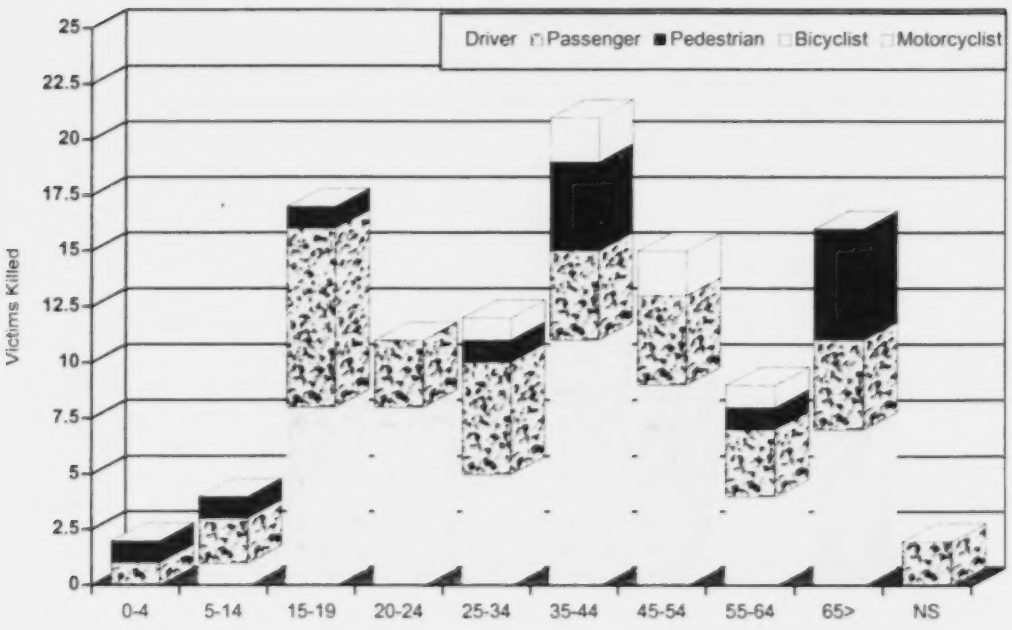
Road User Class	Age Group										Total	%
	0-4	5-14	15-19	20-24	25-34	35-44	45-54	55-64	65>	NS[1]		
Driver	0	1	8	8	5	11	9	4	7	0	53	48.6
Passenger	1	2	8	3	5	4	4	3	4	2	36	33.0
Pedestrian	1	1	1	0	1	4	0	1	5	0	14	12.9
Bicyclist	0	0	0	0	0	0	0	0	0	0	0	0.0
Motorcyclist[2]	0	0	0	0	1	2	2	1	0	0	6	5.5
Total	2	4	17	11	12	21	15	9	16	2	109	100.0

[1]Not stated. [2]Includes passengers.

Motor vehicle drivers, excluding motorcyclists, accounted for 48.6% of the persons killed in traffic collisions, while passengers accounted for 33.0%. Pedestrians comprised the third largest group of road users killed (12.9%). Motorcyclists, who include both drivers and passengers, accounted for 5.5% of fatalities.

The 35-44 age group accounted for 19.3% of fatally injured road users, followed by the 15-19 age group at 15.6%. Among persons aged 65 years or older who were killed in traffic collisions, 43.8% were drivers, 31.2% were pedestrians and 25.0% were passengers.

Comparison of Collision Victims Killed by Road User Class and Age Group 2002



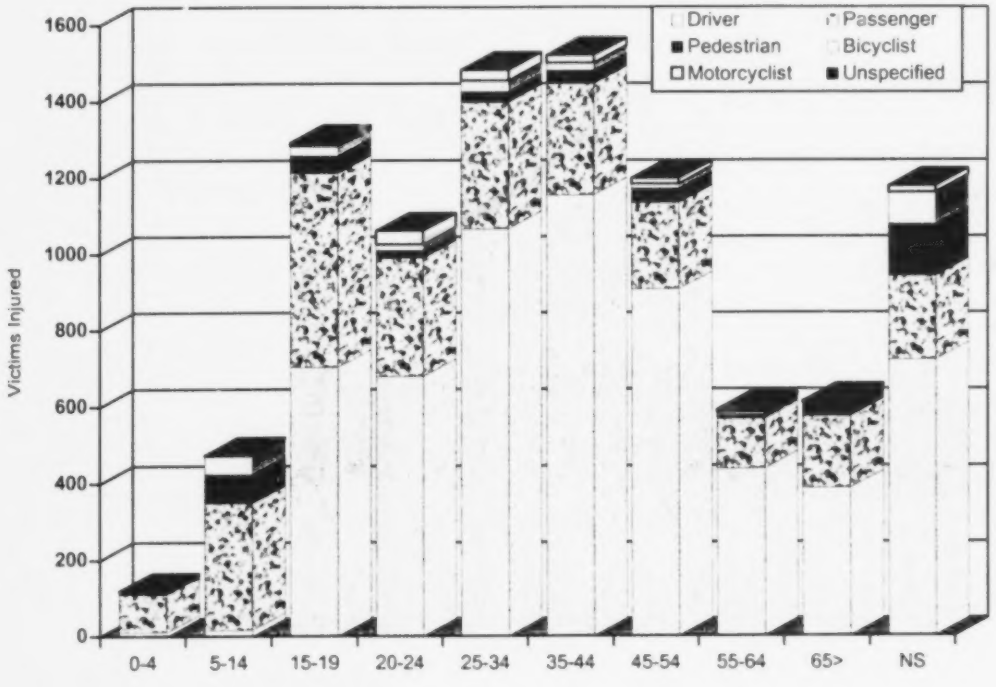
Total Collision Victims Injured by Road User Class and Age Group 2002

Road User Class	Age Group										Total	%
	0-4	5-14	15-19	20-24	25-34	35-44	45-54	55-64	65>	NS[1]		
Driver	11	17	704	680	1067	1155	908	439	388	722	6091	63.9
Passenger	98	331	508	310	330	290	225	129	186	219	2626	27.6
Pedestrian	8	78	47	21	29	36	39	11	35	137	441	4.6
Bicyclist	2	47	25	15	28	19	12	6	2	83	239	2.5
Motorcyclist[2]	0	1	8	36	28	20	14	7	3	17	134	1.4
Riding/Hanging	0	0	0	0	1	1	0	0	0	0	2	-.-
Total	119	474	1292	1062	1483	1521	1198	592	614	1178	9533	100.0

[1]Not stated. [2]Includes passengers.

Motor vehicle drivers and passengers accounted for 91.5% of road users injured. The remaining injured road users were distributed as follows: pedestrians 4.6%, bicyclists 2.5%, and motorcyclists 1.4%. The 35-44 age group accounted for 16.0% of road users injured, followed by the 25-34 age group, at 15.6%.

Comparison of Collision Victims Injured by Road User Class and Age Group 2002



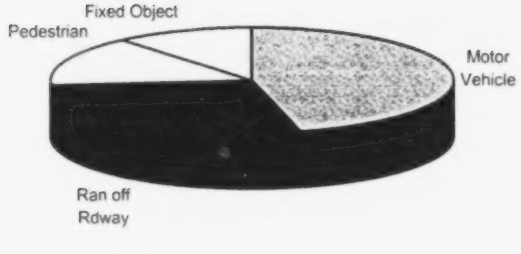
By Collision and Injury Type
2002

Collision Type	Injury Type		Total	%
	Killed	Injured		
Pedestrian	14	440	454	4.7
Motor Vehicle	42	6759	6801	70.5
Train	3	14	17	0.2
Motorcycle	6	129	135	1.4
Bicycle	1	242	243	2.5
Animal	2	195	197	2.1
Fixed Object	10	475	485	5.0
Other Object	5	44	49	0.5
Overturned	1	107	108	1.1
Ran Off Roadway	25	1120	1145	11.9
Other Non-Collision	0	8	8	0.1
Total	109	9533	9642	100.0

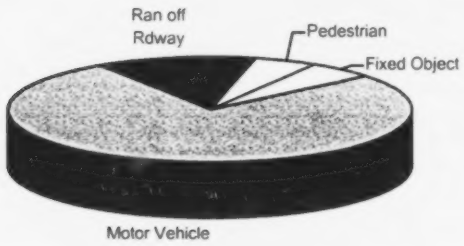
Of the total collision victims 42 or 38.5% were killed and 6,759 or 70.9% were injured in "motor vehicle to motor vehicle" collisions. A further 11.9% of all casualties were involved in "ran off roadway" collisions, followed by "fixed object" collisions (5.0%).

Distribution of Top Four Collision Types
By Killed and Injured
2002

Killed



Injured

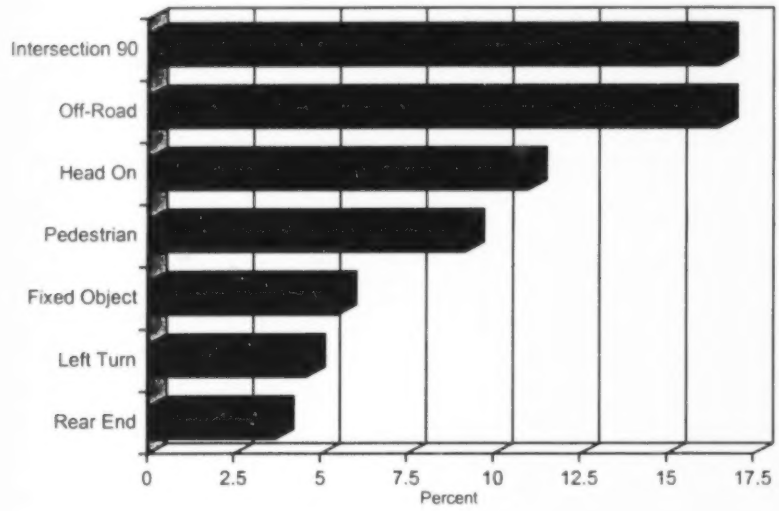


By Accident Configuration and Injury Type
2002

Configuration	Injury Type		Total	%
	Killed	Injured		
Rear End	4	2777	2781	28.9
Head On	12	184	196	2.0
Side Swipe	0	77	77	0.8
Side Swipe	0	157	157	1.6
Overtaking	0	82	82	0.8
Right Turn	1	29	30	0.3
Right Turn	0	24	24	0.2
Left Turn	0	142	142	1.5
Left Turn	1	49	50	0.5
Left Turn	4	599	603	6.3
Intersection 90°	18	1775	1793	18.6
Off-Road Right	11	559	570	5.9
Off-Road Left	7	483	490	5.1
Fixed Object	6	319	325	3.4
Parking	0	37	37	0.4
Pedestrian	10	379	389	4.0
Other [1]	35	1861	1896	19.7
Total	109	9533	9642	100.0

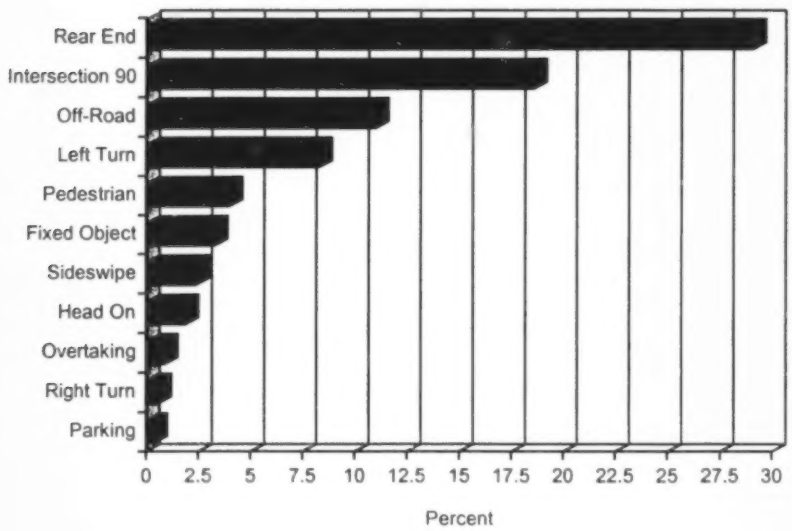
[1]Accidents with more than two vehicles involved or more than one configuration noted.

Distribution of Collision Victims Killed by Accident Configuration* 2002



Most fatalities occurred in "intersection 90^{0}", "off-road, left and right", "head on", and "pedestrian" accident configurations. "Off-road, right or left" configuration respectively involves a single vehicle entering the right-hand ditch or a vehicle crossing the road and entering the left-hand ditch. Injury severity may be higher in these "off-road" collisions due to vehicle rollover.

Distribution of Collision Victims Injured by Accident Configuration* 2002



*Other category not graphically presented as the configuration usually refers to accidents involving more than two vehicles or more than one configuration.

Injuries occurred most often in "rear-end" (29.1%) and "intersection 90^{0}" (18.6%) accident configurations and least often in "parking" configurations.

By Vehicle Defect and Injury Type
2002

Vehicle Defect	Injury Type		Total	%
	Killed	Injured		
No Apparent Defect	40	5300	5340	55.4
Defective Brakes	2	21	23	0.3
Defective Steering	0	5	5	0.1
Defective Headlights	0	0	0	0.0
Defective Brake Lights	0	0	0	0.0
Defective Lighting (Unspecified)	0	1	1	-.-
Defective Engine Control/Drive Train	0	3	3	-.-
Defective Suspension/Wheels	0	1	1	-.-
Defective Tires	0	32	32	0.4
Defective Tow Hitch/Yoke	0	0	0	0.0
Defective Exhaust System	0	2	2	-.-
Hood/Tailgate/Door/Covering Opened	0	1	1	-.-
Defective Glazing (Obscured Windows)	0	0	0	0.0
Vehicle Modifications	0	0	0	0.0
Fire	0	3	3	-.-
Overloaded/Oversized	0	3	3	-.-
Load Shifted/Spilled	0	3	3	-.-
Jack-Knife/Trailer Swing	1	1	2	-.-
Hydroplaning of Tires	0	3	3	-.-
Not Stated	66	4154	4220	43.8
Total	109	9533	9642	100.0

Three victims were killed and 79 were injured in vehicles that had an apparent defect at the time of collision occurrence. There were more casualties in vehicles with "defective tires" (32) and "defective brakes" (23).

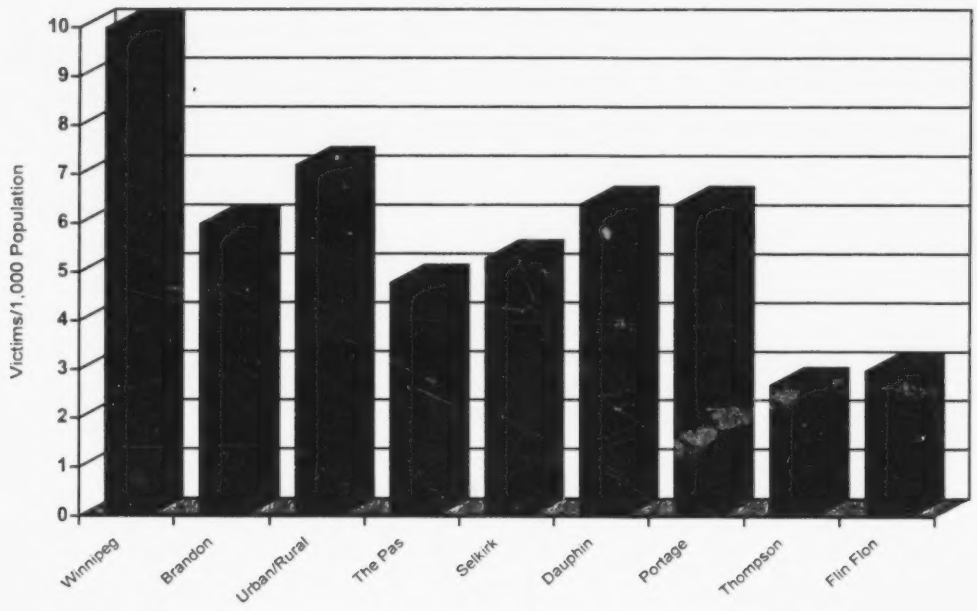
By Provincial Location and Injury Type
2002

Location	Injury Type		Total	%	Victims /1,000 Population[1]
	Killed	Injured			
Winnipeg	20	6149	6169	64.0	10.0
Brandon	2	237	239	2.5	6.0
Portage la Prairie	0	83	83	0.9	6.4
Flin Flon	0	18	18	0.2	3.0
Dauphin	0	52	52	0.5	6.4
Thompson	0	36	36	0.4	2.7
The Pas	0	28	28	0.3	4.8
Selkirk	0	52	52	0.5	5.3
Other Urban	4	585	589	6.1	7.2
Rural	83	2293	2376	24.6	
Total	109	9533	9642	100.0	8.6

[1]Based on 2001 rounded-up census statistics from Statistics Canada.

Traffic accidents within the City of Winnipeg accounted for 64.0% (6169) of the total collision victims. Other communities accounted for 11.4% (1097) of the total collision victims and rural areas 24.6% (2376). Rural areas accounted for 76.1% (83) of all fatally injured collision victims. Much higher speeds on rural roadways (90 to 100 km/h) versus urban areas (50 to 60 km/h) may partly account for the more than 3 to 1 ratio between rural and urban fatalities.

Incidence of Total Collision Victims
by Provincial Location /1,000 Population
2002



By Safety Equipment and Ejection
Fatal Vehicle Occupant Victims[1]

2002

Safety Equipment	Victims	%	Ejected	Partially Ejected
Lap Belt Installed – In Use	0	0.0		
Lap Belt Installed – Not In Use	6	7.2	1	
Shoulder Belt Installed – In Use	0	0.0		
Shoulder Belt Installed – Not In Use	2	2.4		
Lap/Shoulder Belt Assembly – In Use	26	31.4	1	
Combined Belt Assembly Installed – Not in Use	23	27.7	15	2
Safety Seat Improperly Installed – In Use	0	0.0		
Air Bag Deployed/Safety Belt In Use	1	1.2		
Air Bag Deployed/Safety Belt Not In Use	2	2.4		
Safety Seat Installed/Not in Use	0	0.0		
Unknown	23	27.7	4	
Total	83	100.0	21	2

[1]Fatal vehicle occupant victim category excludes pedestrians, motorcyclists and bicyclists.

Of the total fatal vehicle occupant victims, 33 or 39.7% were known not to be wearing a safety device at time of collision occurrence.

A total of 25.3% (21) of applicable fatal vehicle occupant victims were ejected from the vehicle. Of these, only one was known to have been using safety equipment. The two partially ejected victims had not been using an available combined belt assembly.

Section 6

Pedestrian Victims

INTRODUCTION TO SECTION 6

This section deals with pedestrians killed and injured in traffic collisions. Month, hour and day occurrences are examined. Attention is focussed on the age of the pedestrian and the most frequently reported actions prior to being struck.

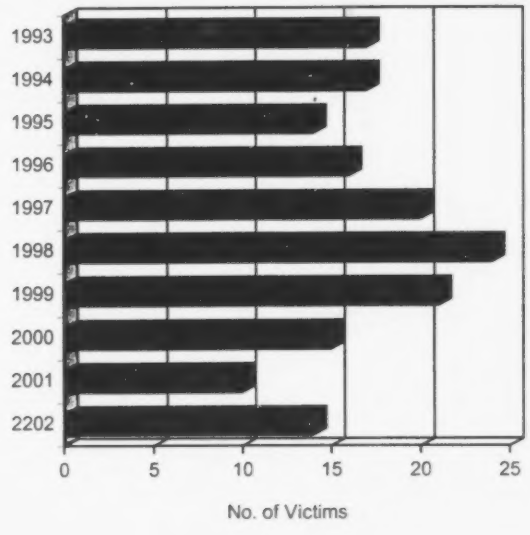
Ten Year Summary
1993 – 2002

Year	Injury Type		Total
	Killed	Injured	
1993	17	711	728
1994	17	634	651
1995	14	650	664
1996	16	535	551
1997	20	481	501
1998	24	496	520
1999	21	504	525
2000	15	484	499
2001	10	460	470
2002	14	441	455

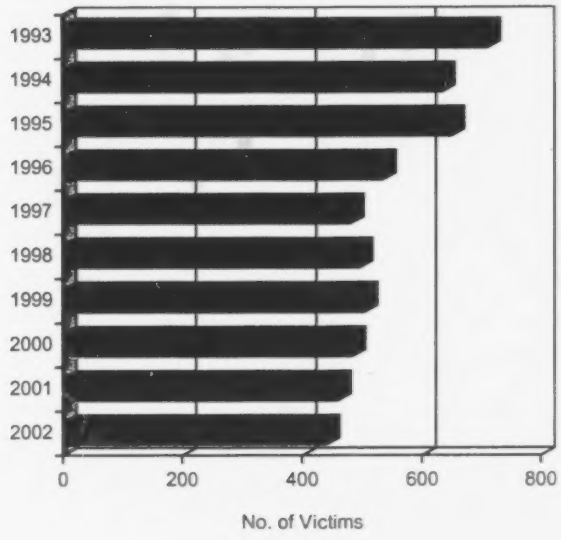
There were 441 pedestrians injured in traffic collisions in 2002, down 4.1% from 2001. The number of pedestrians killed increased from 10 in 2001 to 14 in 2002.

Comparison of Pedestrian Victims
1993 – 2002

Killed



Injured

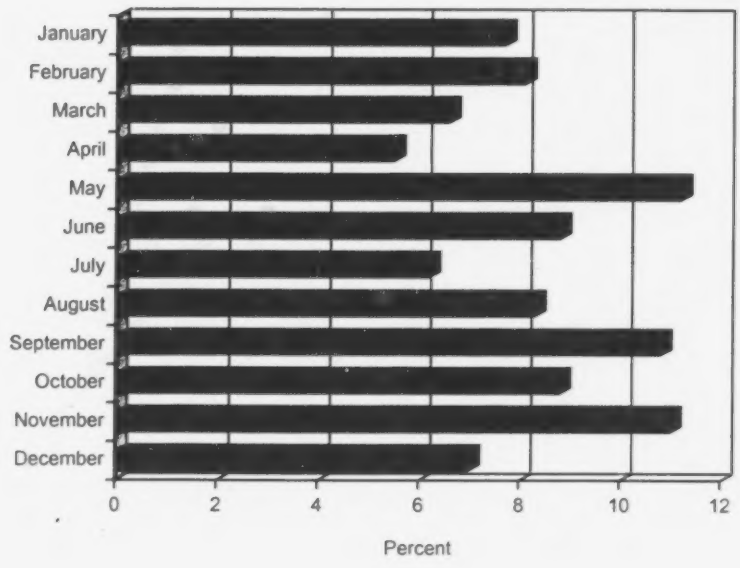


By Month of Occurrence and Injury Type
2002

Month	Injury Type		Total	%
	Killed	Injured		
January	1	34	35	7.7
February	1	36	37	8.1
March	0	30	30	6.6
April	0	25	25	5.5
May	0	51	51	11.2
June	1	39	40	8.8
July	2	26	28	6.2
August	2	36	38	8.3
September	4	45	49	10.8
October	2	38	40	8.8
November	0	50	50	11.0
December	1	31	32	7.0
Total	14	441	455	100.0

Four pedestrian fatalities were recorded in September and two in each of the months of July, August, and October. May accounted for the highest number of total pedestrian victims with 51, followed by November with 50 and September with 49.

Distribution of Total Pedestrian Victims
by Month of Occurrence
2002



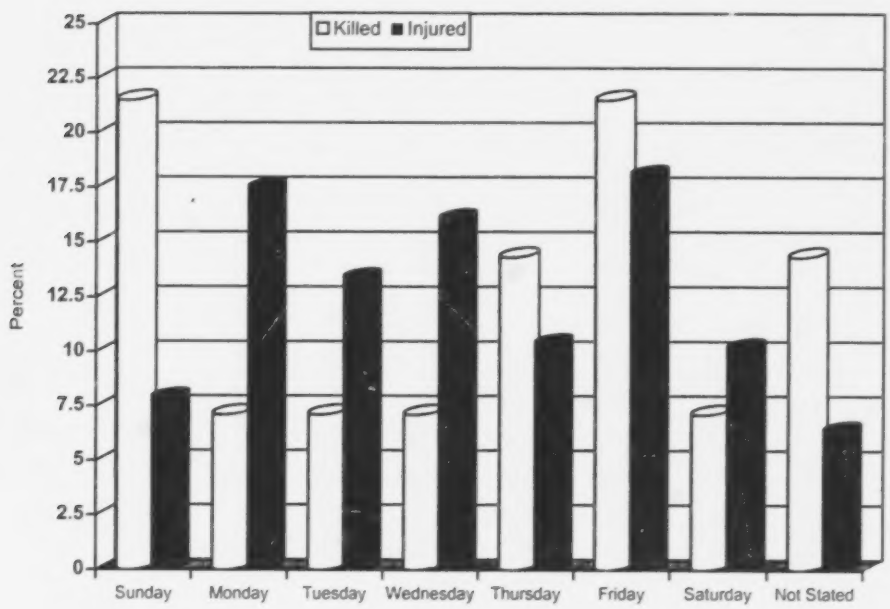
By Day of Occurrence and Injury Type
2002

Day	Injury Type		Total	%
	Killed	Injured		
Sunday	3	35	38	8.4
Monday	1	77	78	17.1
Tuesday	1	59	60	13.2
Wednesday	1	71	72	15.8
Thursday	2	46	48	10.6
Friday	3	80	83	18.2
Saturday	1	45	46	10.1
Not Stated	2	28	30	6.6
Total	14	441	455	100.0

Pedestrian fatalities most often occurred on Sunday or Friday (3 each) and least often on Monday, Tuesday, Wednesday, and Saturday (1 each). Two pedestrian fatal collisions occurred on Thursday.

Pedestrian injuries happened most often occurred on Friday and Monday (18.1% and 17.5% respectively) and least often on Sunday (7.9%)

Comparison of Pedestrian Victims
by Day of Occurrence and Injury Type
2002

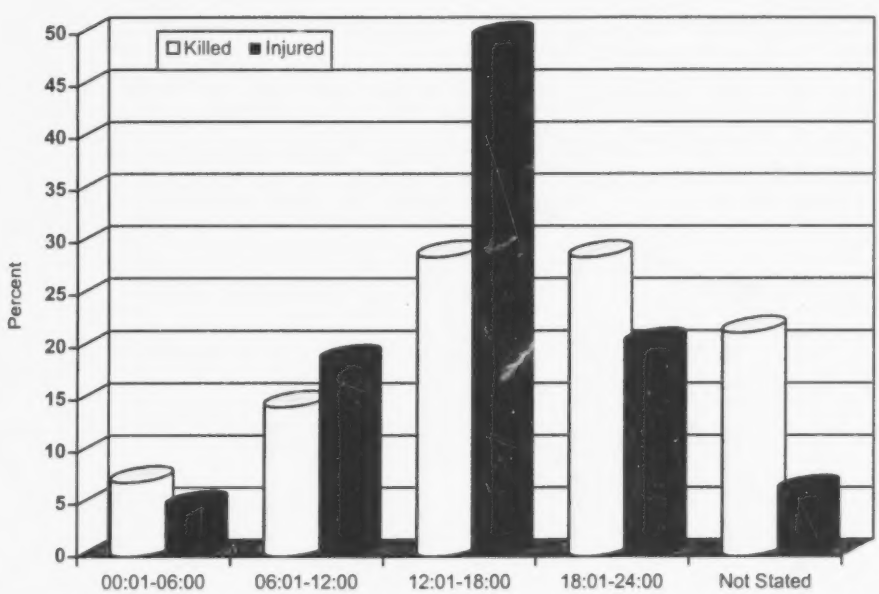


By Time of Occurrence and Injury Type
2002

Time	Injury Type		Total	%
	Killed	Injured		
00:01 - 06:00	1	21	22	4.8
06:01 - 12:00	2	83	85	18.7
12:01 - 18:00	4	219	223	49.0
18:01- 24:00	4	90	94	20.7
Not Stated	3	28	31	6.8
Total	14	441	455	100.0

The time period 12:01-18:00 hours accounted for 49.0% (223) of the total number of pedestrian collision victims. The time periods 12:01-18:00 and 18:01–24:00 hours had the highest number of pedestrian victims killed, with each accounting for 4 or 28.6%.

Comparison of Pedestrian Victims
by Time of Occurrence and Injury Type
2002

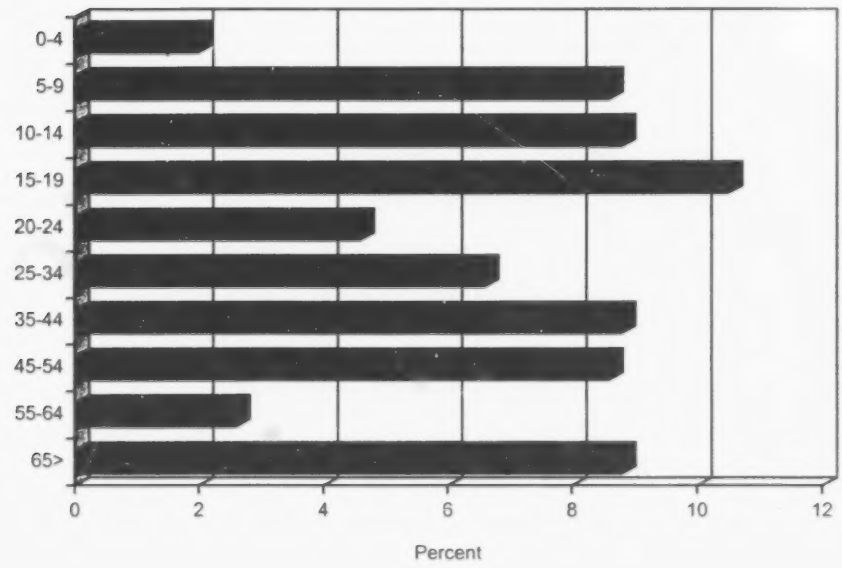


By Age Group and Injury Type
2002

Age Group	Injury Type		Total	%
	Killed	Injured		
0-4	1	8	9	2.0
5-9	1	38	39	8.6
10-14	0	40	40	8.8
15-19	1	47	48	10.5
20-24	0	21	21	4.6
25-34	1	29	30	6.6
35-44	4	36	40	8.8
45-54	0	39	39	8.6
55-64	1	11	12	2.6
65>	5	35	40	8.8
Not Stated	0	137	137	30.1
Total	14	441	455	100.0

Of the total number of pedestrians killed, 35.7% (5) were over 64, followed by 28.6% (4) aged 35-44. By contrast, 14.7% of the *total fatally injured victims* fall into the over 64 and 19.3% into the 35-44 age groups. Children (0-14) are over-represented as pedestrian victims, comprising 14.4% of the total fatally injured pedestrians, compared to 5.5% *of all fatally injured collision victims*. As well, this age group made up 19.5% of pedestrians injured, compared to 6.2% *of all injured collision victims*.

Distribution of Total Pedestrian Victims
by Known Age Group
2002



By Pedestrian Action and Injury Type
2002

Pedestrian Action	Injury Type		Total	%
	Killed	Injured		
At Intersection, crossing with right-of-way	1	92	93	20.5
At Intersection, crossing without right-of-way	1	41	42	9.2
At Intersection, crossing, no traffic control	0	13	13	2.9
Between Intersections, crossing roadway	2	47	49	10.8
Walking along roadway with traffic	0	4	4	0.9
Walking along roadway against traffic	0	5	5	1.1
On Sidewalk/Median/Safety Zone	1	18	19	4.2
Walking on roadway (travelled portion)	1	19	20	4.4
From behind Vehicle/Object on roadside	0	7	7	1.5
Running into roadway	3	37	40	8.8
Getting on/off another vehicle	0	1	1	0.2
Pushing/Working on vehicle	0	2	2	0.4
Playing on roadway	0	2	2	0.4
Working on roadway	0	2	2	0.4
Lying on roadway	2	1	3	0.7
Unknown	3	150	153	33.6
Total	14	441	455	100.0

Two pedestrians were fatally injured at intersections and 12 at non-intersection locations. "Running into roadway" accounted for the greatest number of pedestrian deaths (3), followed by "crossing roadway between intersections" (2) and "lying on roadway" (2). The largest number of non-fatal injuries occurred while "crossing an intersection with the right-of-way" (92 or 20.9%), followed by "crossing roadway between intersections" (47 or 10.7%), and "crossing intersection without right-of-way" (41 or 9.3%).

Total Killed and Injured Victims
By Pedestrian Action and Age Group
2002

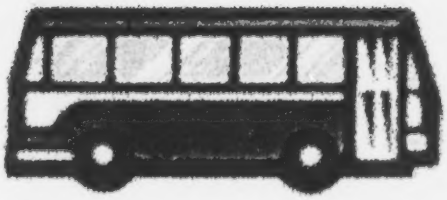
Pedestrian Action	Age Group											Total
	0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65>	NS	
At Intersection, crossing with right-of-way	0	1	9	7	4	9	11	11	4	10	27	93
At Intersection, crossing without right-of-way	0	5	4	1	4	2	6	3	0	5	12	42
At Intersection, crossing with no traffic control	0	0	1	0	1	1	2	4	0	1	3	13
Between Intersections, crossing roadway	1	5	6	8	1	2	4	2	2	2	16	49
Walking along roadway with traffic	0	0	0	1	1	0	0	0	0	1	1	4
Walking along roadway against traffic	0	0	0	1	0	0	1	2	0	0	1	5
On Sidewalk/Median/Safety Zone	1	0	2	1	0	1	3	4	1	3	3	19
Walking on Roadway (travelled portion)	0	0	0	4	0	4	2	2	1	2	5	20
From behind Vehicle/ Object on roadway	1	1	0	0	0	0	1	1	0	0	3	7
Running into Roadway	4	11	9	6	1	0	1	1	0	1	6	40
Getting On/Off Another Vehicle	0	0	0	0	0	0	0	0	0	0	1	1
Pushing/Working on Vehicle	0	0	0	1	1	0	0	0	0	0	0	2
Playing on Roadway	0	1	0	0	0	0	0	0	0	0	1	2
Working on Roadway	0	0	0	0	1	0	0	0	0	1	0	2
Lying on Roadway	0	0	0	1	0	1	1	0	0	0	0	3
Unknown	2	15	9	17	7	10	8	9	4	14	58	153
Total	9	39	40	48	21	30	40	39	12	40	137	455
%	2.0	8.6	8.8	10.5	4.6	6.6	8.8	8.6	2.6	8.8	30.1	100.0

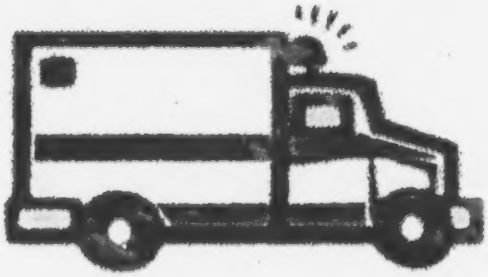
Among all pedestrian casualties aged 15 and older, the two most frequently reported pedestrian actions prior to being struck by a motor vehicle were "crossing at intersections with right-of-way" and "crossing roadway between intersections".

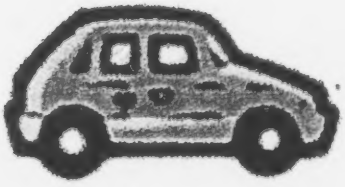
Among pedestrians four years of age and younger, the most frequently cited pedestrian action was "running into roadway". Of the total 5-9 and 10-14 year old pedestrians, "running into the roadway" (25.3%) and "crossing roadway between intersections" (13.9%) were the most frequently reported actions.

Section 7

Vehicle Involvement







INTRODUCTION TO SECTION 7

This section deals with the number of vehicles involved in collisions. It does **not** indicate the number of collisions. Since many collisions involve more than one vehicle, the total number of vehicles involved in collisions will significantly exceed the total number of collisions.

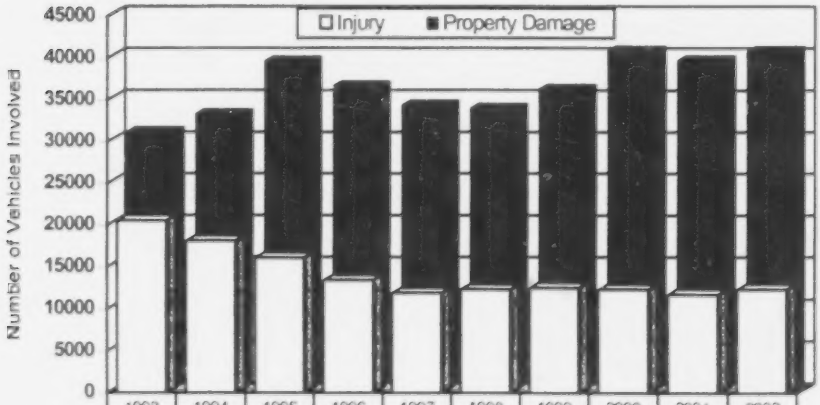
Each vehicle involved in a collision is counted and provision is made for vehicle types such as automobiles, vans, pick-up trucks, types of emergency vehicles. Vehicles involved in collisions that were, or were not, transporting hazardous loads and the nature of these loads is also indicated.

Ten Year Summary
1993 – 2002

Year	Collision Type			Total
	Fatal	Injury	Property Damage	
1993	161	20573	30628	51362
1994	161	18140	32798	51099
1995	188	16120	39084	55392
1996	115	13428	36169	49712
1997	147	11955	33857	45959
1998	170	12371	33464	46005
1999	157	12543	35757	48457
2000	140	12362	40308	52810
2001	138	11770	39215	51123
2002	156	12384	40289	52829

A total of 156 vehicles were involved in fatal traffic collisions in 2002, an increase of 13.0% from 2001. The number of vehicles involved in injury collisions increased by 5.2% (from 11,770 to 12,384) and property damage collisions by 2.7% (39,215 to 40,289).

Ten Year Summary
Vehicle Involvement by Injury and Property Damage Collision Type
1993 – 2002*



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Injury	20573	18140	16120	13428	11955	12371	12543	12362	11770	12384
Property Damage	30628	32798	39084	36169	33857	33464	35757	40308	39215	40289

*Fatal statistics not shown due to low values.

By Vehicle Type and Collision Type
2002

Vehicle Type	Collision Type			Total	%
	Fatal	Injury	Property Damage		
Automobile	72	8432	26947	35451	67.1
Mini/Multi-Purpose Van	9	1236	4011	5256	10.0
Van under 4500 kg	3	257	941	1201	2.3
Pick-up under 4500 kg	32	1454	6306	7792	14.8
Truck over 4500 kg (unit chassis)	4	141	509	654	1.2
Power Unit for Semi-Trailer	16	100	375	491	0.9
Truck/Camper	0	5	26	31	0.1
Motorhome	0	5	10	15	-.-
Truck (other)	6	261	772	1039	2.0
School Bus	1	14	57	72	0.1
Other School Vehicle	0	0	1	1	-.-
Transit Bus – urban	2	24	32	58	0.1
Para-transit Bus	0	1	4	5	-.-
Intercity Bus	0	22	69	91	0.2
Bus (other)	0	5	16	21	-.-
Motorcycle/Scooter	6	131	76	213	0.4
Moped	0	0	0	0	0.0
Bicycle	1	244	13	258	0.5
Ambulance	0	2	10	12	-.-
Fire	0	2	12	14	-.-
Police	0	21	40	61	0.1
Mobility Vehicle	0	0	0	0	0.0
Snow Vehicle	0	0	0	0	0.0
Farm Equipment	1	4	20	25	0.1
Construction Equipment	0	15	31	46	0.1
Train/Other Rail Vehicle	0	0	0	0	0.0
Off-Road Vehicle	3	8	11	22	-.-
Total	156	12384	40289	52829	100.0

Automobiles, vans and pick-up trucks were involved in 74.4% of fatal collisions, 91.9% of injury collisions, and 94.8% of property damage collisions. Aside from their similarities, vehicles involved in fatal and injury crashes were substantially different. Automobiles were involved in considerably more injury collisions (68.1%) than fatal crashes (46.2%). Heavy trucks/tractor trailers were involved in fatal collisions four times more often than in injury crashes (16.7% versus 4.1%).

By Hazardous Load Type and Collision Type
2002

Hazardous Load	Collision Type			Total	%
	Fatal	Injury	Property Damage		
Explosives	1	6	14	21	-.-
Flammable Gas	0	7	20	27	0.1
Flammable/Combustible Liquids	1	11	13	25	-.-
Flammable Solids/Dangerous When Wet	0	1	1	2	-.-
Oxidizers/Organic Peroxides	0	2	1	3	-.-
Poisonous Substances/Infectious	0	3	1	4	-.-
Radioactives	0	0	0	0	0.0
Corrosives	0	3	1	4	-.-
Miscellaneous Dangerous Substances	0	3	7	10	-.-
General Cargo (non-hazardous)	9	91	304	404	0.8
Empty	1	59	139	199	0.4
Not Applicable	144	12192	39767	52103	98.6
Other	0	0	0	0	0.0
Unknown	0	6	21	27	0.1
Total	156	12384	40289	52829	100.0

Of the total number of vehicles involved in traffic accidents, 96 were known to be carrying "hazardous goods". Two of these vehicles were involved in fatal collisions, 36 in injury collisions, and 58 in property damage collisions.

Section 8

Driver Involvement

INTRODUCTION TO SECTION 8

This section indicates the number of drivers involved in collisions. This number is less than the amount of vehicle involvement as some crashes involve parked vehicles. Information is provided according to gender and age group.

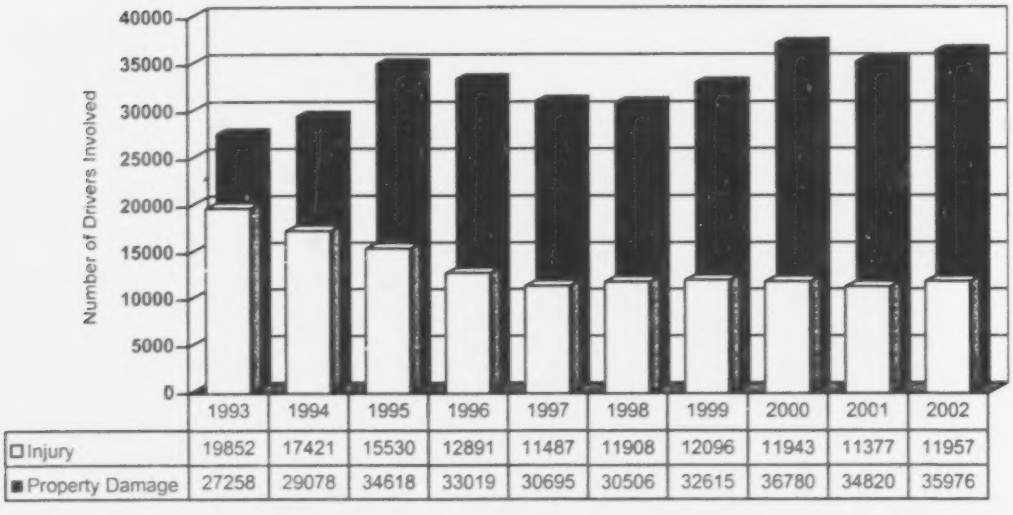
The age group 16-19 recorded the highest rate of collision involvement, at 117 per 1,000 active licenced drivers. The next highest involvement rates were recorded by the age groups 20-24, at 84/1,000 and 25-34, at 60/1,000.

Ten Year Summary
1993 – 2002

Year	Collision Type			Total
	Fatal	Injury	Property Damage	
1993	150	19852	27258	47260
1994	152	17421	29078	46651
1995	171	15530	34618	50319
1996	110	12891	33019	46020
1997	142	11487	30695	42324
1998	164	11908	30506	42578
1999	151	12096	32615	44862
2000	136	11943	36780	48859
2001	127	11377	34820	46324
2002	149	11957	35976	48082

There were 149 drivers involved in fatal accidents in 2002, an increase of 17.3% from 127 in 2001. The number of drivers involved in injury collisions increased by 5.1% from 11,377 in 2001 to 11,957 in 2002. Drivers involved in property damage collisions rose from 34,820 to 35,976, a 3.3% increase.

Ten Year Summary of Driver Involvement in Traffic Collisions by Injury and Property Damage Collision Type, 1993-2002*



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Injury	19852	17421	15530	12891	11487	11908	12096	11943	11377	11957
Property Damage	27258	29078	34618	33019	30695	30506	32615	36780	34820	35976

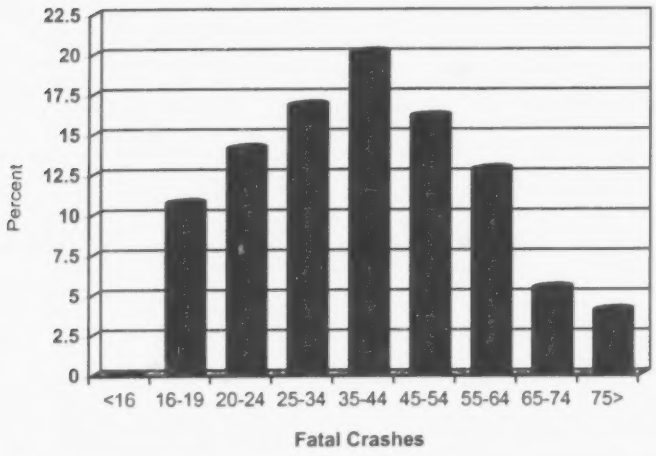
* Fatal statistics not shown due to low values.

By Age Group, Sex, and Collision Type
2002

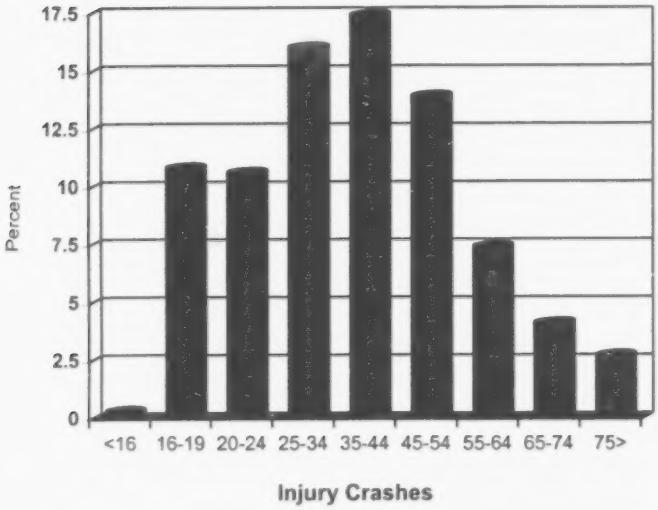
Age Group	Sex	Collision Type						Total	%
		Fatal	%	Injury	%	Property Damage	%		
<16	M	0		18		37		55	
	F	0		16		33		49	
	NS	0		0		0		0	
	Total	0	0.0	34	0.3	70	0.2	104	0.2
16-19	M	15		737		2508		3260	
	F	1		545		1389		1935	
	NS	0		5		23		28	
	Total	16	10.7	1287	10.8	3920	10.9	5223	10.8
20-24	M	16		713		2209		2938	
	F	5		545		1083		1633	
	NS	0		8		24		32	
	Total	21	14.1	1266	10.6	3316	9.2	4603	9.6
25-34	M	19		1072		3010		4101	
	F	6		831		1880		2717	
	NS	0		10		28		38	
	Total	25	16.8	1913	16.0	4918	13.7	6856	14.3
35-44	M	21		1149		3323		4493	
	F	9		924		2183		3116	
	NS	0		10		28		38	
	Total	30	20.1	2083	17.4	5534	15.4	7647	15.9
45-54	M	18		913		2874		3805	
	F	6		740		1751		2497	
	NS	0		4		23		27	
	Total	24	16.1	1657	13.9	4648	12.9	6329	13.2
55-64	M	19		546		1788		2353	
	F	0		337		953		1290	
	NS	0		5		11		16	
	Total	19	12.8	888	7.4	2752	7.6	3659	7.6
65-74	M	7		309		1074		1390	
	F	1		178		534		713	
	NS	0		3		6		9	
	Total	8	5.4	490	4.1	1614	4.5	2112	4.4
75>	M	2		235		716		953	
	F	4		93		331		428	
	NS	0		1		7		8	
	Total	6	4.0	329	2.7	1054	2.9	1389	2.9
Not Stated	M	0		204		797		1001	
	F	0		93		408		501	
	NS	0		1713		6945		8658	
	Total	0	0.0	2010	16.8	8150	22.7	10160	21.1
All Ages	M	117		5896		18336		24349	
	F	32		4302		10545		14879	
	NS	0		1759		7095		8854	
	Total	149	100.0	11957	100.0	35976	100.0	48082	100.0

Male drivers were involved in collisions more often than their female counterparts – 3.7 times more frequently in fatal collisions, 1.4 times more frequently in injury collisions and 1.7 times more frequently in property damage collisions.

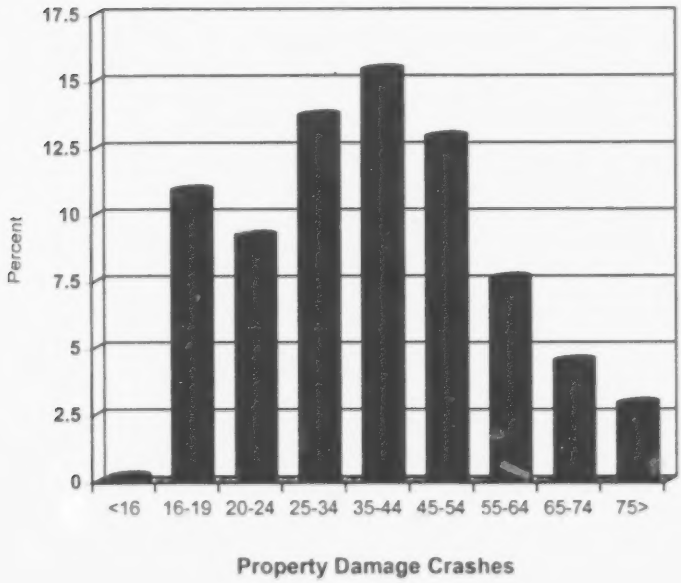
Percentage of Driver Involvement in Crashes (excludes "age not stated")



Of the total drivers involved in fatal crashes the age group 35-44 had the highest involvement (20.1%), followed by the 25-34 age group at 16.8%.



The 35-44 age group also accounted for the highest percentage of all drivers involved in injury collisions (17.4%), followed by those aged 25-34 (16.0%).



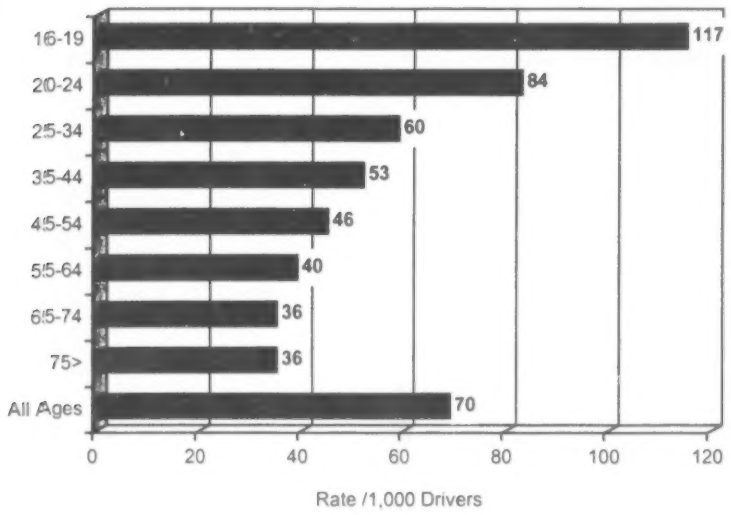
The age groups 35-44 and 25-34 respectively accounted for 15.4% and 13.7% of all drivers involved in property damage collisions.

By Age Group, Sex and Relative Involvement /1,000 Active Drivers 2002

Age Group	Sex	Total Drivers Involved	%	Total Active Licenced Drivers	%	Relative Involvement Rate /1,000
<16	M	55		0		
	F	49		0		
	NS	0		0		
	Total	104	0.2	0	0.0	
16-19	M	3260		24214		135
	F	1935		20487		94
	NS	28		0		
	Total	5223	10.8	44701	6.6	117
20-24	M	2938		29290		100
	F	1633		25362		64
	NS	32		0		
	Total	4603	9.6	54652	8.0	84
25-34	M	4101		60787		67
	F	2717		53224		51
	NS	38		0		
	Total	6856	14.3	114011	16.7	60
35-44	M	4493		77598		58
	F	3116		67103		46
	NS	38		0		
	Total	7647	15.9	144701	21.2	53
45-54	M	3805		74083		51
	F	2497		62586		40
	NS	27		0		
	Total	6329	13.2	136669	20.0	46
55-64	M	2353		50178		47
	F	1290		40718		32
	NS	16		0		
	Total	3659	7.6	90896	13.3	40
65-74	M	1390		33130		42
	F	713		25726		28
	NS	9		0		
	Total	2112	4.4	58856	8.6	36
75>	M	953		22261		43
	F	428		16233		26
	NS	8		0		
	Total	1389	2.9	38494	5.6	36
Not Stated	M	1001		0		
	F	501		0		
	NS	8658		0		
	Total	10160	21.1	0		
All Ages	M	24349		371541		66
	F	14879		311439		48
	NS	8854		0		
	Total	48082	100.0	682980	100.0	70

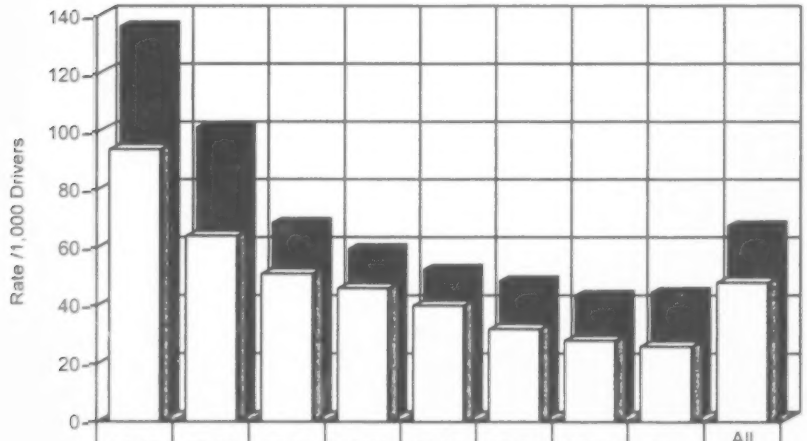
Certain age groups are over-represented in crashes. For example, 16-19 year olds made up 6.6% of the total active licenced drivers, yet accounted for 10.8% of all drivers involved in crashes. In contrast, drivers over 55 years of age made up 27.5% of the total active licenced drivers, but comprised only 14.9% of all drivers in traffic accidents. Drivers between the ages of 20 and 54 made up 65.9% of the total active licenced driver population and accounted for 53.0% of the drivers involved in collisions. (Note: the percentage of drivers involved in collisions by age is limited to those drivers whose ages were known.)

Distribution of Driver Involvement Rates in Traffic Collisions by Age Group and Relative Involvement /1,000 Active Drivers 2002



The 16-19 age group had the highest relative involvement rate at 117/1,000 followed by the 20-24 age group with a rate of 84/1,000. The lowest relative involvement rates belonged to the 65-74 and over 74 age groups, at 36/1,000 drivers. The overall relative involvement rate for all age groups in 2002 was 70/1,000. *The relative involvement rates do not take into account the number of vehicle kilometres travelled by each age group.*

Comparison of Relative Involvement Rates /1,000 Active Drivers by Age Group and Sex 2002

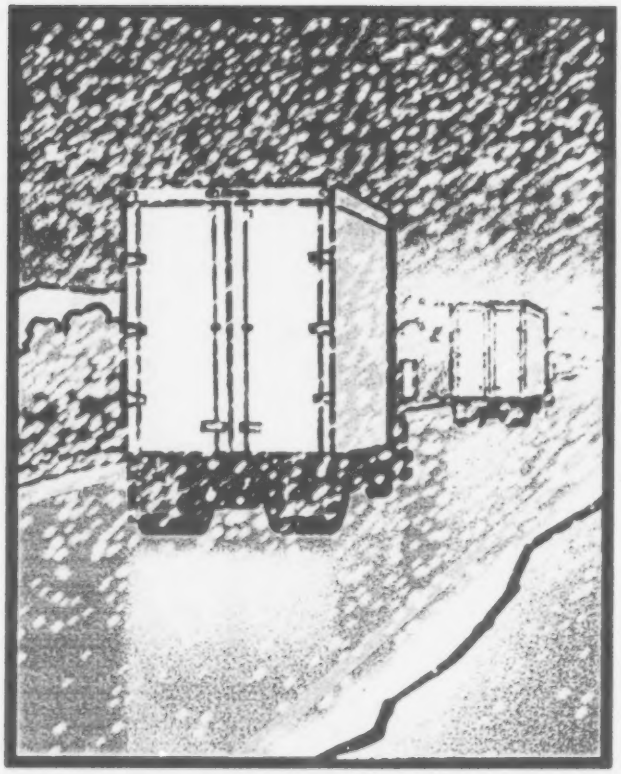


	16-19	20-24	25-34	35-44	45-54	55-64	65-74	75>	All Ages
Female	94	64	51	46	40	32	28	26	48
Male	135	100	67	58	51	47	42	43	66

Male drivers were involved in crashes more often than females. The highest relative involvement occurred in the male age group 16-19 at 135/1,000, compared to female involvement at 94/1,000. The rates for both genders decrease with age.

Section 9

Contributing Factors



INTRODUCTION TO SECTION 9

Contributing factors are those circumstances or factors that the reporting police officer perceives to have directly contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or driving environment.

The collision data system accepts up to three contributing factors for each vehicle involved in a collision. As many as six contributing factors may be recorded for a collision. During the analysis of collisions, knowledge of the factors is important. For instance, because of inattention, a driver may have failed to see a stop sign behind some trees and thereby reduce stopping time. The car's brakes, being in poor condition, caused the vehicle to spin out of control on ice and collide with another vehicle that was speeding through the intersection. The collision may not have occurred if any of these factors were not present.

Driver action is used to determine if the actions performed immediately prior to the collision may have been a factor in the collision.

Human condition identifies those factors that may have affected the individual's ability to drive safely. Of particular interest are the numbers of drivers affected by alcohol, drugs and fatigue.

Safety campaigns are often geared toward driver age groups; therefore driver actions and human conditions are broken down by age group and accident severity (fatal, injury and property damage).

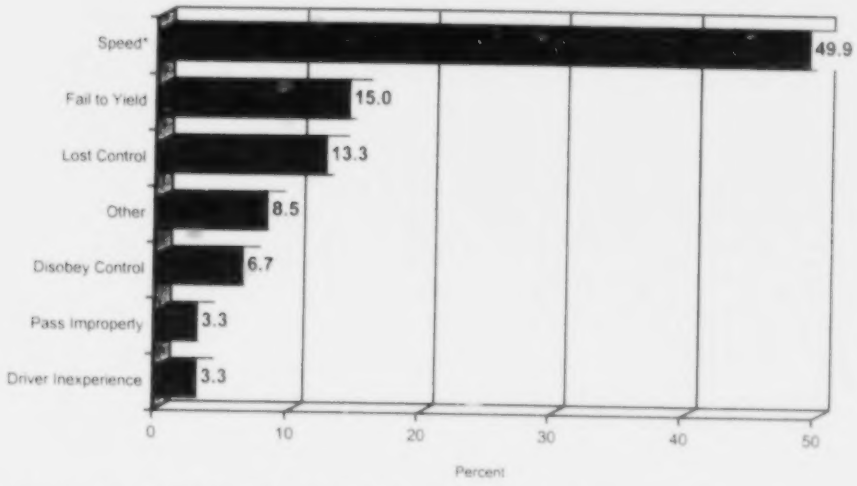
Vehicle defects and environmental conditions are presented according to the number of vehicles involved and whether the vehicle has a mechanical defect that may have been a factor in the collision and also if environmental factors contribute toward the crash.

Driver Involvement in Traffic Collisions by Driver Action and Collision Type 2002

Driver Action	Collision Type			Total	%
	Fatal	Injury	Property Damage		
Driving Properly[1]	46	4903	12672	17621	36.7
Follow Too Closely	0	309	643	952	2.0
Turn Improperly	1	174	500	675	1.4
Exceed Speed Limit	11	63	78	152	0.3
Drive Too Fast For Conditions	17	332	779	1128	2.3
Unsafe Speed (too fast or too slow)	2	45	78	125	0.3
Passing Improperly	2	20	72	94	0.2
Change Lanes Improperly	1	40	275	316	0.7
Fail to Yield	9	422	899	1330	2.8
Disobeyed Traffic Control	4	262	333	599	1.2
Drive Wrong Way	0	6	22	28	0.1
Pass Vehicle at Pedestrian X-Walk	0	7	2	9	-.-
Backing Up Unsafely	1	32	770	803	1.7
Park Improperly	0	3	56	59	0.1
Careless Driving	1	175	291	467	1.0
Lost Control/Off Roadway	8	223	358	589	1.2
Driverless Vehicle	0	0	8	8	-.-
Leave Stop Sign	1	108	175	284	0.6
Fail To Signal	0	4	7	11	-.-
Take Avoiding Action	0	58	169	227	0.5
Driver Inexperience	2	103	248	353	0.7
Pedestrian Error/Confusion	0	17	4	21	-.-
Not Stated	43	4651	17537	22231	46.2
Total	149	11957	35976	48082	100.0

[1]No apparent improper driving action noted on traffic accident report.

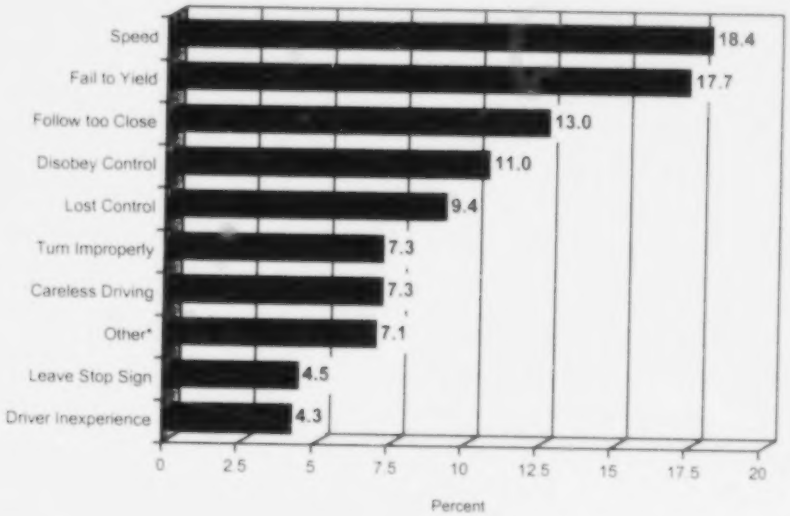
Comparison of At-Fault Driver Actions in Fatal Traffic Collisions 2002



*Speed includes exceeding speed limit, drive too fast for conditions or unsafe operating speed.
Other includes turn improperly, change lanes improperly, backing up unsafely, careless driving, and leave stop sign before safe to do so.

Among at-fault drivers involved in fatal collisions, the most common reported infractions were "speed related" (49.9%), "fail to yield" (15.0%), and "lost control/drive off roadway" (13.3%).

Comparison of At-Fault Driver Actions in Injury Collisions 2002



*Other includes passing improperly, changing lanes improperly, drive wrong way, pass vehicle at pedestrian crosswalk, back-up unsafely, park improperly, fail to signal, and take avoiding action. Pedestrian error/confusion is not included as an at-fault driver action.

The three main at-fault driver actions resulting in injuries were "speed-related" (18.4% or 440), "failure to yield" (17.7% or 422), and "follow too close" (13.0% or 309).

Driver Involvement in Fatal Traffic Collisions by Driver Action and Age Group 2002

Driver Action	Age Group										Total
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65-74	75>	NS	
Drive Properly	0	2	5	9	8	9	11	2	0	0	46
Follow Too Closely	0	0	0	0	0	0	0	0	0	0	0
Turn Improperly	0	0	0	0	1	0	0	0	0	0	1
Exceed Speed Limit	0	2	5	0	4	0	0	0	0	0	11
Drive Too Fast	0	2	3	3	5	3	1	0	0	0	17
Unsafe Speed	0	0	2	0	0	0	0	0	0	0	2
Passing Improperly	0	1	0	0	1	0	0	0	0	0	2
Change Lanes Improperly	0	0	0	0	0	1	0	0	0	0	1
Fail to Yield	0	0	1	1	1	0	3	1	2	0	9
Disobey Traffic Control	0	1	0	1	0	0	1	0	1	0	4
Drive Wrong Way	0	0	0	0	0	0	0	0	0	0	0
Pass at Pedestrian Corridor	0	0	0	0	0	0	0	0	0	0	0
Backing Up Unsafely	0	0	0	0	0	0	0	0	1	0	1
Park Improperly	0	0	0	0	0	0	0	0	0	0	0
Careless Driving	0	1	0	0	0	0	0	0	0	0	1
Lost Control/Off Roadway	0	2	1	1	0	2	0	1	1	0	8
Driverless Vehicle	0	0	0	0	0	0	0	0	0	0	0
Leave Stop Sign	0	0	0	0	0	0	0	0	1	0	1
Fail to Signal	0	0	0	0	0	0	0	0	0	0	0
Take Avoiding Action	0	0	0	0	0	0	0	0	0	0	0
Driver Inexperience	0	0	1	1	0	0	0	0	0	0	2
Pedestrian Error/Confusion	0	0	0	0	0	0	0	0	0	0	0
Not Stated	0	5	3	9	10	9	3	4	0	0	43
Total	0	16	21	25	30	24	19	8	6	0	149
At-fault rate/10,000 active licenced drivers	-.-	2.0	2.4	0.6	0.8	0.4	0.5	0.3	1.6	-.-	0.9

Of the total *at-fault drivers* involved in fatal collisions, the age groups 20-24 and 16-19 recorded the highest rate of driver infractions at 2.4/10,000 and 2.0/10,000 active licenced drivers respectively. These age groups were more than twice as likely to incur at-fault infractions than drivers of all age groups. Drivers aged 75 and older were 1.8 times as likely.

Among all at-fault drivers, the most commonly reported driving infractions were "drive too fast for conditions" (28.3%), "exceed speed limit" (18.3%), and "lost control/drive off road" (13.3%).

Driver Involvement in Injury Traffic Collisions by Driver Action and Age Group 2002

Driver Action	Age Group										Total
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65-74	75>	NS	
Drive Properly	7	454	565	989	1119	894	453	231	128	63	4903
Follow Too Closely	1	38	35	60	45	28	13	13	7	69	309
Turn Improperly	2	23	23	24	20	25	23	11	12	11	174
Exceed Speed Limit	1	33	18	4	1	2	1	1	0	2	63
Drive Too Fast	2	81	53	63	60	25	18	6	1	23	332
Unsafe Speed	2	7	15	8	4	4	2	1	1	1	45
Passing Improperly	0	3	5	2	4	4	1	0	0	1	20
Change Lanes Improperly	0	7	3	4	11	4	2	3	2	4	40
Fail to Yield	1	51	51	59	79	57	41	32	28	23	422
Disobey Traffic Control	2	37	29	49	45	23	22	13	17	25	262
Drive Wrong Way	0	0	0	2	1	0	0	2	1	0	6
Pass at Pedestrian Corridor	0	1	2	1	1	0	0	0	2	0	7
Backing Up Unsafely	0	7	1	3	4	3	3	3	3	5	32
Park Improperly	0	0	0	2	0	0	0	1	0	0	3
Careless Driving	1	22	26	27	23	19	10	2	4	41	175
Lost Control/Off Roadway	3	52	40	40	33	20	15	11	8	1	223
Driverless Vehicle	0	0	0	0	0	0	0	0	0	0	0
Leave Stop Sign	0	19	14	14	16	11	8	10	10	6	108
Fail to Signal	0	0	0	0	2	0	1	0	0	1	4
Take Avoiding Action	0	7	11	8	9	10	3	4	3	3	58
Driver Inexperience	5	69	13	11	3	2	0	0	0	0	103
Pedestrian Error/Confusion	1	2	1	5	3	3	1	1	0	0	17
Not Stated	6	374	361	538	600	523	271	145	102	1731	4651
Total	34	1287	1266	1913	2083	1657	888	490	329	2010	11957
At-fault rate/1,000 active licenced drivers	-.-	10.2	6.2	3.4	2.5	1.7	1.8	1.9	2.6	-.-	3.5

The age group 16-19 recorded the highest reported rate of driving infractions in injury collisions, at 10.2/1,000 active drivers, followed by 20-24 at 6.2/1,000, and 25-34 at 3.4/1,000.

Certain age groups display *different* at-fault driver involvement patterns. Among at-fault drivers 16-19 years old, "drive too fast for conditions" (17.7%), "driver inexperience" (15.1%), and "lost control/drive off roadway" (11.4%) were the most commonly reported infractions. Conversely, among those aged 65 and older, "fail to yield" accounted for 28.3% of at-fault driver actions, followed by "disobey traffic controls", at 14.1%, and "turn improperly", at 10.8%.

Driver Involvement in Property Damage Traffic Collisions by Driver Action and Age Group 2002

Driver Action	Age Group										Total
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65-74	75>	NS	
Drive Properly	14	1356	1370	2288	2615	2263	1284	704	437	341	12672
Follow Too Closely	1	109	88	98	101	81	43	26	16	80	643
Turn Improperly	1	84	48	66	75	57	52	26	36	55	500
Exceed Speed Limit	1	28	20	5	6	5	0	1	0	12	78
Drive Too Fast	2	190	134	134	120	78	40	16	10	55	779
Unsafe Speed	0	22	19	10	7	7	5	1	4	3	78
Passing Improperly	0	6	16	10	8	9	3	3	3	14	72
Change Lanes Improperly	0	38	27	41	30	36	15	19	11	58	275
Fail to Yield	0	120	83	121	135	102	84	67	76	111	899
Disobeyed Traffic Control	2	47	31	48	43	39	25	24	21	53	333
Drive Wrong Way	0	2	3	2	3	3	2	4	1	2	22
Pass at Pedestrian Corridor	0	0	0	0	0	0	0	0	0	2	2
Backing Up Unsafely	0	106	63	101	130	107	83	60	39	81	770
Park Improperly	1	12	5	6	6	6	6	4	6	4	56
Careless Driving	2	38	48	37	36	23	19	13	10	65	291
Lost Control/Off Roadway	6	81	51	68	59	33	24	16	14	6	358
Driverless Vehicle	1	2	0	0	1	1	1	0	0	2	8
Leave Stop Sign	0	24	22	20	21	23	16	10	22	17	175
Fail to Signal	0	1	0	3	1	0	0	0	2	0	7
Take Avoiding Action	0	35	29	28	34	18	13	5	4	3	169
Driver Inexperience	16	157	33	19	9	8	2	1	1	2	248
Pedestrian Error/Confusion	0	0	3	0	1	0	0	0	0	0	4
Not Stated	23	1462	1223	1813	2093	1749	1035	614	341	7184	17537
Total	70	3920	3316	4918	5534	4648	2752	1614	1054	8150	35976
At-fault rate/1,000 active licenced drivers	-.-	24.7	13.2	7.2	5.7	4.7	4.8	5.0	7.2	-.-	8.4

The age group 16-19 recorded the highest reported rate of driving infractions in property damage collisions, at 24.7/1,000 active drivers, followed by those aged 20-24 at 13.2/1,000.

Certain age groups display *different* at-fault driver involvement patterns. "Drive too fast for conditions" (17.2%), "driver inexperience" (14.2%), and "failing to yield" (10.9%) were the primary at-fault actions in the 16-19 year age group. For drivers over 64, the most common infractions were "failing to yield" (25.0%), "backing up unsafely" (17.3%), and "turning improperly" (10.8%).

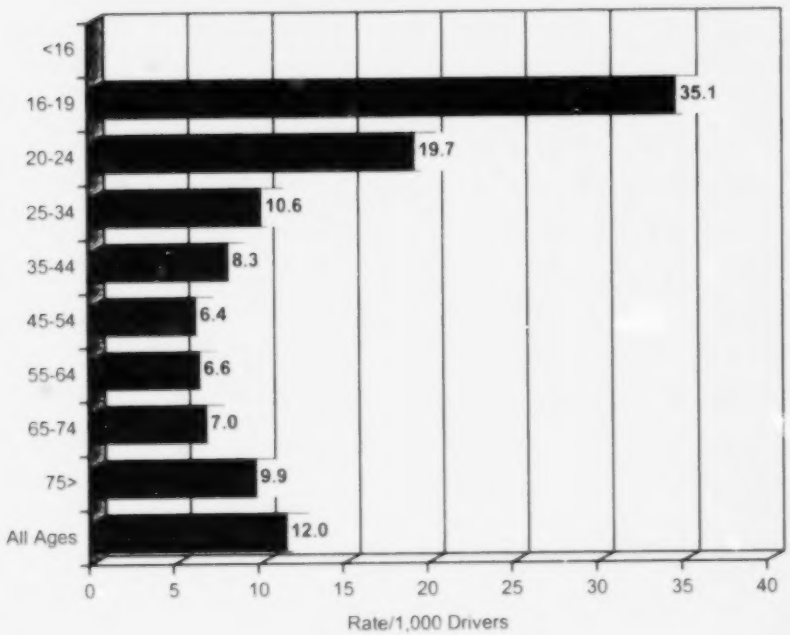
Driver Involvement in All Traffic Collisions by Driver Action and Age Group 2002

Driver Action	Age Group										Total
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65-74	75>	NS	
Drive Properly	21	1812	1940	3286	3742	3166	1748	937	565	404	17621
Follow Too Closely	2	147	123	158	146	109	56	39	23	149	952
Turn Improperly	3	107	71	90	96	82	75	37	48	66	675
Exceed Speed Limit	2	63	43	9	11	7	1	2	0	14	152
Drive Too Fast	4	273	190	200	185	106	59	22	11	78	1128
Unsafe Speed	2	29	36	18	11	11	7	2	5	4	125
Passing Improperly	0	10	21	12	13	13	4	3	3	15	94
Change Lanes Improperly	0	45	30	45	41	41	17	22	13	62	316
Fail to Yield	1	171	135	181	215	159	128	100	106	134	1330
Disobeyed Traffic Control	4	85	60	98	88	62	48	37	39	78	599
Drive Wrong Way	0	2	3	4	4	3	2	6	2	2	28
Pass at Pedestrian Corridor	0	1	2	1	1	0	0	0	2	2	9
Backing Up Unsafely	0	113	64	104	134	110	86	63	43	86	803
Park Improperly	1	12	5	8	6	6	6	5	6	4	59
Careless Driving	3	61	74	64	59	42	29	15	14	106	467
Lost Control/Off Roadway	9	135	92	109	92	55	39	28	23	7	589
Driverless Vehicle	1	2	0	0	1	1	1	0	0	2	8
Leave Stop Sign	0	43	36	34	37	34	24	20	33	23	284
Fail to Signal	0	1	0	3	3	0	1	0	2	1	11
Take Avoiding Action	0	42	40	36	43	28	16	9	7	6	227
Driver Inexperience	21	226	47	31	12	10	2	1	1	2	353
Pedestrian Error/Confusion	1	2	4	5	4	3	1	1	0	0	21
Not Stated	29	1841	1587	2360	2703	2281	1309	763	443	8915	22231
Total	104	5223	4603	6856	7647	6329	3659	2112	1389	10160	48082
At-fault rate/1,000 active licenced drivers	-.-	35.1	19.7	10.6	8.3	6.4	6.6	7.0	9.9	-.-	12.0

For all traffic collisions, the 16-19 age group recorded the highest rate of driving infractions at 35.1/1,000 active licenced drivers, followed by those aged 20-24, at 19.7.

There is a significant difference in the type of infractions committed by younger and older drivers. For those aged 16-19, the chief at-fault driver actions were "driving too fast for conditions" (17.4%), "dr[illegible] inexperience" (14.4%), and "failing to yield" (10.9%). For drivers over 64, the chief at-fault driver actions were "failing to yield" (26.0%), "backing up unsafely" (13.4%), and "turning improperly" (10.7%).

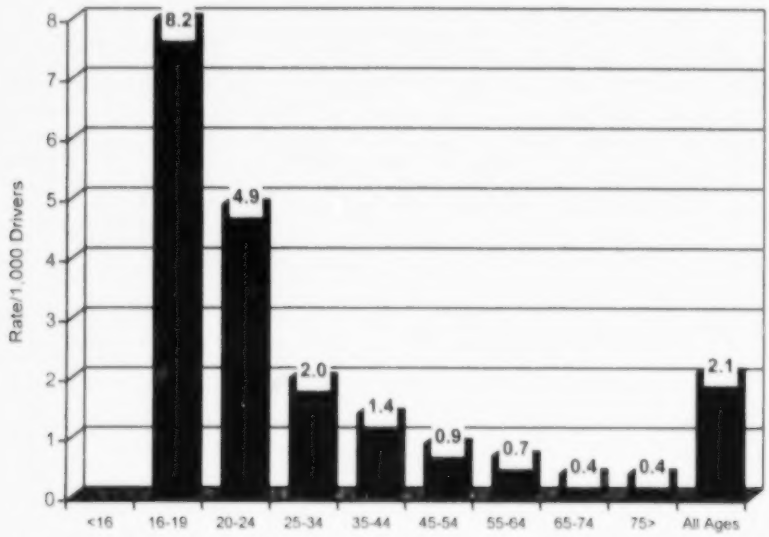
Rate of At-Fault Driver Actions
by 1,000 Active Licenced Drivers and Age Group
2002



This graph illustrates that among drivers committing at-fault driver actions, the 16-19 and 20-24 age groups reported the highest at-fault incidence (35.1/1,000 and 19.7/1,000 respectively). The rate for drivers aged 16-24, at 26.6/1,000, was more than double the rate for all age groups of 12.0/1,000.

The lowest rates occurred among the age groups 45-54 (6.4/1,000), 55-64 (6.6/1,000), and 65-74 (7.0/1,000).

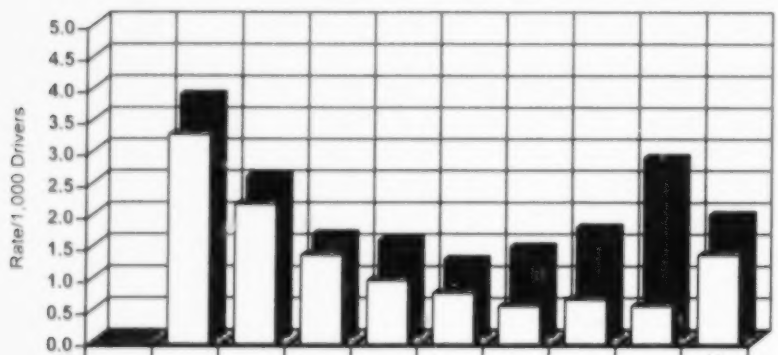
Speed-Related* At-Fault Driver Actions by 1,000 Active Licenced Drivers 2002



*Speed-related includes exceeding speed limit, drive too fast for conditions and unsafe operating speed.

Drivers in the 16-19 age group recorded the highest rate of at-fault speed-related driver actions, nearly four times higher than for all age groups (8.2/1,000 active licenced drivers versus 2.1/1,000 active licenced drivers).

Fail to Yield and Follow Too Close Driver Actions Per 1,000 Active Licenced Drivers 2002



	<16	16-19	20-24	25-34	35-44	45-54	55-64	65-74	75>	All Ages
Follow too close	-.-	3.3	2.2	1.4	1.0	0.8	0.6	0.7	0.6	1.4
Fail to Yield	-.-	3.8	2.5	1.6	1.5	1.2	1.4	1.7	2.8	1.9

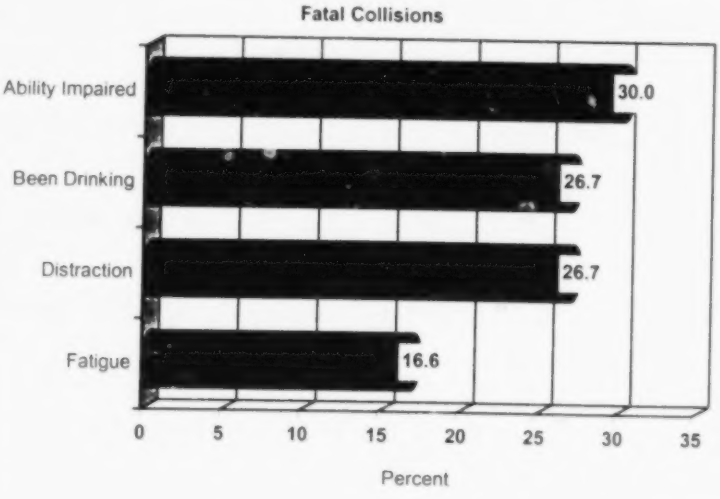
The "fail to yield" infraction recorded an overall involvement rate of 1.9 per 1,000 active licenced drivers. The 16-19 year age group recorded the highest rate, at 3.8/1,000, followed by drivers aged 75 or older, at 2.8/1,000. The "follow too closely" involvement rate for all drivers was 1.4/1,000 with the highest rates incurred by the 16-19 and 20-24 year age groups at 3.3/1,000 and 2.2/1,000 respectively.

Driver Involvement in Traffic Collisions by Human Condition and Collision Type 2002

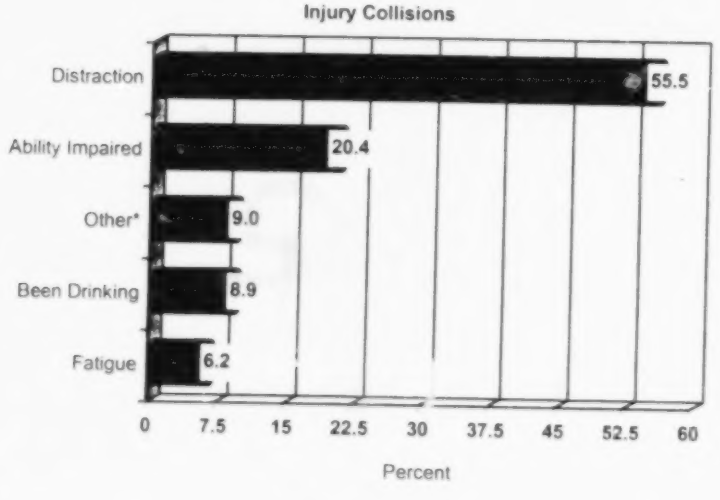
Human Condition	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Apparently Normal	73	6386	16549	23008	47.9
Loss of Consciousness	0	28	16	44	0.1
Extreme Fatigue/Fell Asleep	5	43	46	94	0.2
Defective Eyesight	0	3	9	12	-.-
Defective Hearing	0	2	2	4	-.-
Medical Disability	0	6	6	12	-.-
Physical Disability	0	6	7	13	-.-
Mental Disability	0	1	4	5	-.-
Mental Confusion/Unable to Remember	0	8	20	28	0.1
Sudden Illness	0	3	4	7	-.-
Ability Impaired by Alcohol	9	142	186	337	0.7
Ability Impaired by Drugs	0	5	1	6	-.-
Had Been Drinking/Suspected Alcohol Use[1]	8	62	85	155	0.3
Distraction/Inattention	8	386	817	1211	2.5
Exceed Hours of Service	0	0	3	3	-.-
Not Stated	46	4876	18221	23143	48.2
Total	149	11957	35976	48082	100.0

[1]These statistics represent only those collisions where alcohol involvement was apparent.

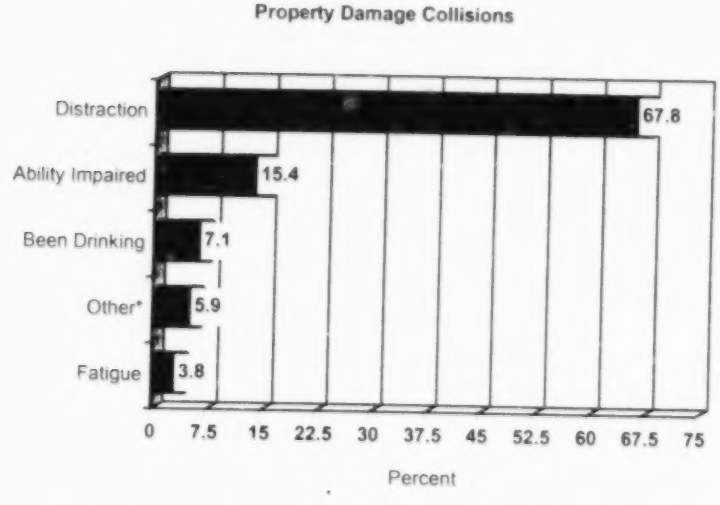
Comparison of At-Fault Human Condition Factors in Crashes



This graph demonstrates that among the at-fault drivers involved in fatal crashes, 56.7% were reported to have consumed alcohol. Of these drivers, 30.0% had their "ability impaired by alcohol" while 26.7% "had been drinking".



This graph illustrates a substantially different pattern of at-fault drivers involved in injury-producing crashes. "Distraction/ inattention" (55.5%) was the most frequently reported driver condition. Alcohol consumption was the second reported condition: however, these figures were lower than those reported drivers involved in fatal crashes. Prior to collision occurrence, 20.4% of the at-fault drivers had their "ability impaired by alcohol", while 8.9% "had been drinking".



"Distraction/inattention" is the most significant at-fault driver condition in property damage crashes, accounting for 67.8% of at-fault conditions versus 55.5% for injury collisions. Conversely, while alcohol consumption accounted for 29.3% of at-fault conditions in injury collisions it accounted for 22.5% in property damage collisions.

*For both injury and property damage collisions, other includes loss of consciousness, defective eyesight, hearing, medical, physical and mental disability, sudden illness, impaired drugs and exceed hours of service.

Driver Involvement in Fatal Traffic Collisions by Human Condition and Age Group 2002

Human Condition	Age Group										Total
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65-74	75>	NS	
Apparently Normal	0	7	8	13	12	14	13	3	3	0	73
Loss of Consciousness	0	0	0	0	0	0	0	0	0	0	0
Extreme Fatigue/Sleep	0	2	0	1	0	2	0	0	0	0	5
Defective Eyesight	0	0	0	0	0	0	0	0	0	0	0
Defective Hearing	0	0	0	0	0	0	0	0	0	0	0
Medical Disability	0	0	0	0	0	0	0	0	0	0	0
Physical Disability	0	0	0	0	0	0	0	0	0	0	0
Mental Disability	0	0	0	0	0	0	0	0	0	0	0
Mental Confusion	0	0	0	0	0	0	0	0	0	0	0
Sudden Illness	0	0	0	0	0	0	0	0	0	0	0
Ability Impaired Alcohol	0	1	4	0	2	2	0	0	0	0	9
Ability Impaired Drugs	0	0	0	0	0	0	0	0	0	0	0
Had Been Drinking Suspected Alcohol Use[1]	0	2	2	0	3	1	0	0	0	0	8
Distraction/Inattention	0	1	2	1	1	1	1	0	1	0	8
Exceed Hours of Service	0	0	0	0	0	0	0	0	0	0	0
Not Stated	0	3	5	10	12	4	5	5	2	0	46
Total	0	16	21	25	30	24	19	8	6	0	149
At-fault rate/10,000 active licenced drivers	-.-	1.3	1.5	0.2	0.4	0.4	0.1	0.0	0.3	-.-	0.4

[1] These statistics are understated and represent only those collisions where alcohol involvement was apparent.

The age group 20-24 recorded the highest reported rate of at-fault human condition factors in fatal collisions at 1.5/10,000 active licenced drivers, followed by the 16-19 year age group, at 1.3/10,000 active licenced drivers.

"Ability impaired by alcohol" (30.0%)", "had been drinking/suspected alcohol use" (26.7%), and "distraction/inattention" (26.7%) were the primary contributing factors in fatal crashes where a known factor was identified.

Driver Involvement in Injury Traffic Collisions by Human Condition and Age Group 2002

Human Condition	Age Group										Total
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65-74	75>	NS	
Apparently Normal	13	722	759	1228	1333	1071	555	311	193	201	6386
Loss of Consciousness	0	2	5	0	3	6	5	6	1	0	28
Extreme Fatigue/Sleep	1	9	4	5	5	7	7	5	0	0	43
Defective Eyesight	0	0	0	0	0	0	1	0	2	0	3
Defective Hearing	0	0	0	0	0	1	0	0	1	0	2
Medical Disability	0	0	0	2	1	0	1	0	2	0	6
Physical Disability	0	0	1	0	0	1	0	1	1	2	6
Mental Disability	0	0	0	0	1	0	0	0	0	0	1
Mental Confusion	0	0	0	0	0	1	1	1	5	0	8
Sudden Illness	0	1	0	0	0	2	0	0	0	0	3
Ability Impaired Alcohol	1	19	17	40	36	17	5	4	2	1	142
Ability Impaired Drugs	2	0	0	1	2	0	0	0	0	0	5
Had Been Drinking Suspected Alcohol Use[1]	1	18	14	11	10	4	3	0	0	1	62
Distraction/Inattention	1	67	46	57	74	40	24	21	22	34	386
Exceed Hours of Service	0	0	0	0	0	0	0	0	0	0	0
Not Stated	15	449	420	569	618	507	286	141	100	1771	4876
Total	34	1287	1266	1913	2083	1657	888	490	329	2010	11957
At-fault rate/1,000 active drivers	-.-	2.6	1.6	1.0	0.9	0.6	0.5	0.6	0.9	-.-	1.0

[1]These statistics are understated and represent only those collisions where alcohol involvement was apparent.

The age group 16-19 recorded the highest rate of at-fault human condition factors in injury collisions at 2.6/1,000 active drivers, followed by 20-24 at 1.6/1,000.

As a percentage of at-fault human condition collision factors among drivers, <16- 19 years old "distraction/ inattention" accounted for 57.8% and "impaired by alcohol" for 16.4%. In the 20 to 54 combined group, "distraction/inattention" was slightly lower among the younger driver (52.5% versus 57.8%). However alcohol involvement was somewhat greater in the 20-54 age group (36.0% versus 31.9%).

For drivers 65 years and older "distraction" (58.1%) was the major contributing factor in injury crashes, followed by "loss of consciousness" (9.5%).

Driver Involvement in Property Damage Traffic Collisions by Human Condition and Age Group 2002

Human Condition	Age Group										Total
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65-74	75>	NS	
Apparently Normal	30	2042	1829	2877	3238	2733	1573	926	582	719	16549
Loss of Consciousness	0	0	1	3	2	6	2	1	1	0	16
Extreme Fatigue/Sleep	0	8	12	12	5	2	4	2	1	0	46
Defective Eyesight	0	1	0	0	0	0	0	0	7	1	9
Defective Hearing	0	0	0	0	0	0	0	0	2	0	2
Medical Disability	0	0	0	1	1	2	0	1	1	0	6
Physical Disability	0	0	1	0	1	2	0	0	3	0	7
Mental Disability	0	0	2	2	0	0	0	0	0	0	4
Mental Confusion	0	0	1	1	1	2	0	5	9	1	20
Sudden Illness	0	1	0	2	0	0	0	0	1	0	4
Ability Impaired Alcohol	0	23	39	49	37	20	11	3	0	4	186
Ability Impaired Drugs	0	0	0	0	1	0	0	0	0	0	1
Had Been Drinking Suspected Alcohol Use[1]	0	16	15	20	12	7	3	1	1	10	85
Distraction/Inattention	8	153	90	120	126	95	62	49	65	49	817
Exceed Hours of Service	0	2	0	0	0	1	0	0	0	0	3
Not Stated	32	1674	1326	1831	2110	1778	1097	626	381	7366	18221
Total	70	3920	3316	4918	5534	4648	2752	1614	1054	8150	35976
At-fault rate/1,000 active drivers	-.-	4.6	2.9	1.8	1.3	1.0	0.9	1.1	2.4	-.-	1.8

[1]These statistics are understated and represent only those collisions where alcohol involvement was apparent.

The age group 16-19 recorded the highest rate of at-fault human condition factors in property damage collisions at 4.6/1,000, followed by 20-24 at 2.9/1,000 and 75+ at 2.4/1,000.

"Distraction inattention" (67.8%), "ability impaired by alcohol" (15.4%), and "had been drinking/suspected alcohol use" (7.1%) were the primary at-fault human condition factors in property damage collisions where a known factor was identified.

Driver Involvement in All Traffic Collisions by Human Condition and Age Group 2002

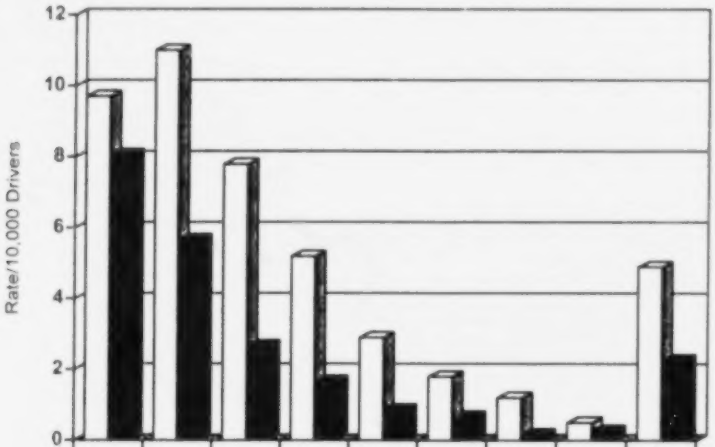
Human Condition	Age Group										Total
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65-74	75>	NS	
Apparently Normal	43	2771	2596	4118	4583	3818	2141	1240	778	920	23008
Loss of Consciousness	0	2	6	3	5	12	7	7	2	0	44
Extreme Fatigue/Sleep	1	19	16	18	10	11	11	7	1	0	94
Defective Eyesight	0	1	0	0	0	0	1	0	9	1	12
Defective Hearing	0	0	0	0	0	1	0	0	3	0	4
Medical Disability	0	0	0	3	2	2	1	1	3	0	12
Physical Disability	0	0	2	0	1	3	0	1	4	2	13
Mental Disability	0	0	2	2	1	0	0	0	0	0	5
Mental Confusion	0	0	1	1	1	3	1	6	14	1	28
Sudden Illness	0	2	0	2	0	2	0	0	1	0	7
Ability Impaired Alcohol	1	43	60	89	75	39	16	7	2	5	337
Ability Impaired Drugs	2	0	0	1	3	0	0	0	0	0	6
Had Been Drinking Suspected Alcohol Use[1]	1	36	31	31	25	12	6	1	1	11	155
Distraction/Inattention	9	221	138	178	201	136	87	70	88	83	1211
Exceed Hours of Service	0	2	0	0	0	1	0	0	0	0	3
Not Stated	47	2126	1751	2410	2740	2289	1388	772	483	9137	23143
Total	104	5223	4603	6856	7647	6329	3659	2112	1389	10160	48082
At-fault rate/1,000 active drivers	-.-	7.3	4.7	2.9	2.2	1.6	1.4	1.7	3.3	-.-	2.8

[1]These statistics are understated and represent only those collisions where alcohol involvement was apparent.

Overall, the 16-19 age group recorded the highest rate of at-fault human condition factors at 7.3/1,000, followed by 20-24 at 4.7/1,000, and 75> at 3.3/1,000.

"Distraction/inattention" (62.7%), "ability impaired by alcohol" (17.5%), and "had been drinking" (8.0%) were the primary at-fault human condition factors.

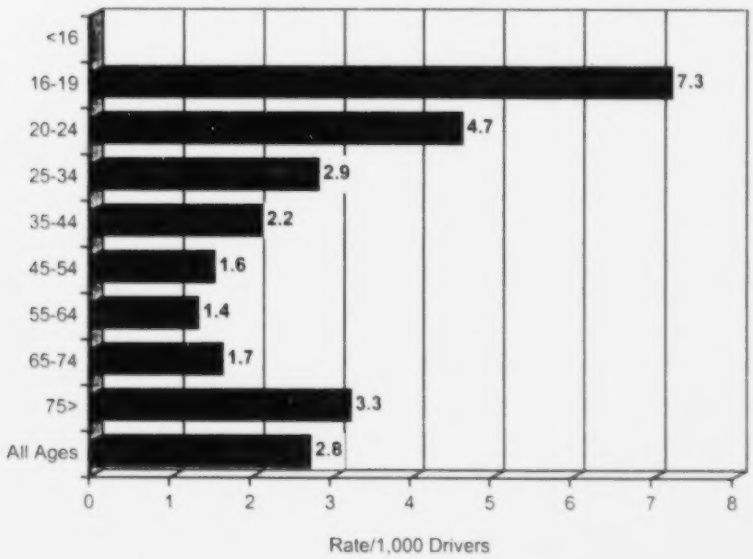
Alcohol-Related Human Condition Factors by 10,000 Active Licenced Drivers and Age Group 2002



	16-19	20-24	25-34	35-44	45-54	55-64	65-74	75>	All Ages
Impaired Alcohol	9.7	11	7.8	5.2	2.9	1.8	1.2	0.5	4.9
Had Been Drinking	8.1	5.7	2.7	1.7	0.9	0.7	0.2	0.3	2.3

Alcohol was a greater factor in accident causation among younger age groups, with 9.7/10,000 active licenced drivers aged 16-19 impaired by alcohol and 8.1/10,000 believed to have consumed alcohol. The respective rates for those aged 20-24 was 11.0/10,000 and 5.7/10,000. The lowest alcohol involvement rates were recorded for drivers aged 55 or older for which the rate was consistently below 1.9/10,000 active drivers.

Rate of At-Fault Human Condition Factors by 1,000 Active Licenced Drivers and Age Group 2002



The 16-19 age group recorded the highest rate of at-fault human condition factors, at 7.3/1,000 active licenced drivers, followed by the 20-24 age group at 4.7/1,000 and the 75+ age group at 3.3/1,000.

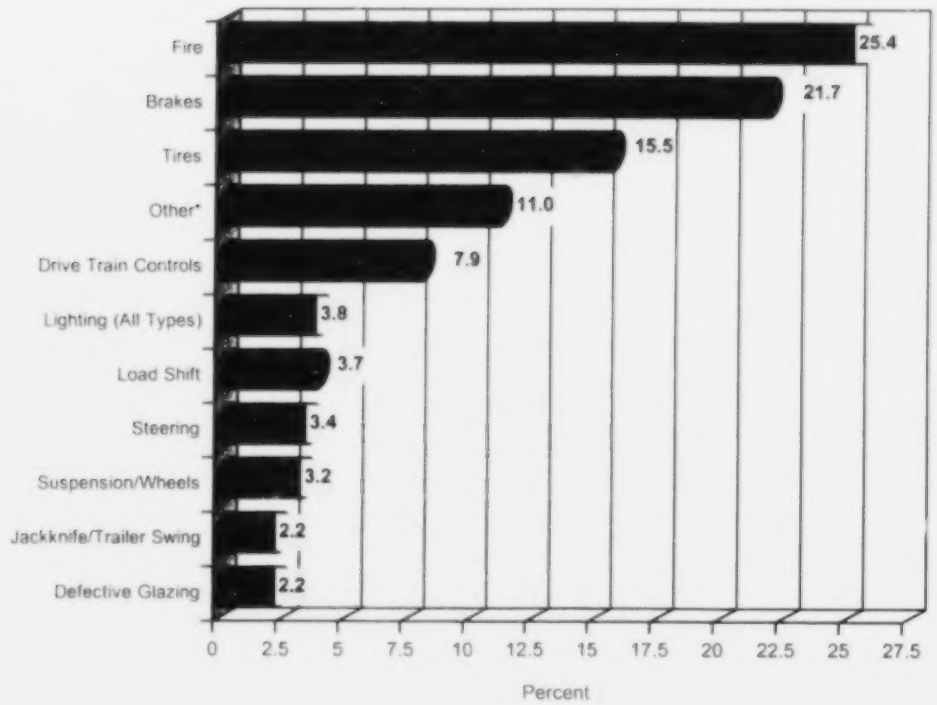
Vehicle Involvement in Traffic Collisions by Vehicle Defect and Collision Type 2002

Vehicle Defect[1]	Collision Type			Total	%
	Fatal	Injury	P. Damage		
No Apparent Defect	76	6368	16540	22984	43.6
Defective Brakes	2	26	60	88	0.2
Defective Steering	0	4	10	14	-.-
Defective Headlights	0	0	3	3	-.-
Defective Brake Lights	0	1	3	4	-.-
Defective Lighting (Unspecified)	1	4	3	8	-.-
Defective Engine Controls/Drive Train	0	8	24	32	0.1
Defective Suspension/Wheels	0	1	12	13	-.-
Defective Tires	1	21	41	63	0.1
Defective Tow Hitch/Yoke	0	1	7	8	-.-
Defective Exhaust System	0	3	2	5	-.-
Hood/Tailgate/Door/Covering Opened	0	1	13	14	-.-
Defective Glazing (obscured window)	0	3	6	9	-.-
Vehicle Modifications	0	0	5	5	-.-
Fire	0	3	100	103	0.2
Overloaded/Oversized	0	3	3	6	-.-
Load Shifted/Spilled	0	4	11	15	-.-
Jack-Knife/Trailer Swing	1	0	8	9	-.-
Hydroplaning of Tires	0	2	5	7	-.-
Not Stated	75	5931	23433	29439	55.8
Total	156	12384	40289	52829	100.0

[1] *The reader is cautioned that the "vehicle defect" statistics are obtained from the traffic accident reports completed by the person reporting the collision and as such they may be unaware of any vehicle defect.*

Of the total number of vehicles involved in traffic collisions, 43.6% had "no apparent defect" at the time of collision occurrence. Only 0.6% or 406 of the vehicles involved were reported to have had a vehicle defect that contributed to a collision.

Distribution of At-Fault Vehicle Defect Factors in Collision Causation 2002



*Other includes defective exhaust system, defective tow hitch, overloaded/oversized, hydroplaning of tires, vehicle modifications, and hood/tailgate/covering opening.

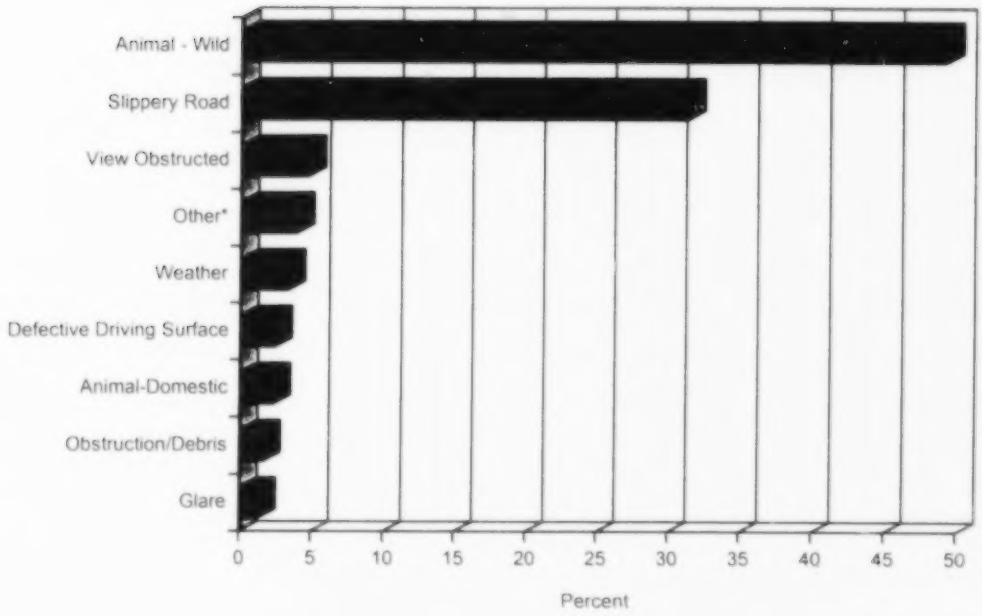
The distribution of at-fault "vehicle defects" is based on 406 vehicles involved in traffic collisions that had a *readily apparent* defect at time of collision occurrence.

Vehicle Involvement in Traffic Collisions by Environmental Condition and Collision Type 2002

Environmental Condition	Collision Type			Total	%
	Fatal	Injury	P. Damage		
No Apparent Contributing Factor	122	11318	34792	46232	87.5
Animal Action – Wild	1	185	3057	3243	6.1
Animal Action – Domestic	2	25	126	153	0.3
Slippery Road Surface	16	516	1533	2065	3.9
Snow Drift	0	14	39	53	0.1
Obstruction/Debris on Roadway	0	17	87	104	0.2
View Obstructed/Limited	0	71	238	309	0.6
Glare	1	34	51	86	0.2
Construction Zone	0	11	26	37	0.1
Defective Driving Surface	0	58	99	157	0.3
Shoulders Defective	1	6	15	22	0.1
Lane Markings Inadequate	0	4	8	12	-.-
Defective/Inoperative Traffic Control Device	0	2	9	11	-.-
Weather	12	71	136	219	0.4
Pedestrian Corridor in Use	0	5	6	11	-.-
Uninvolved Vehicle	0	30	48	78	0.1
Uninvolved Pedestrian	1	9	10	20	0.1
Presence of Prior Accident	0	8	9	17	-.-
Total	156	12384	40289	52829	100.0

Environmental conditions were cited as contributing factors for 12.5% of all vehicles involved in traffic collisions. The most significant factors were "wild animal action" and "slippery road surface".

Distribution of At-Fault Environmental Factors in Collision Causation 2002



*Other includes snow drift, construction zone, uninvolved pedestrian/vehicle, pedestrian corridor, prior accident, defective shoulders, traffic control device and lane markings.

Environmental conditions were a factor in the involvement of 6,597 vehicles in collisions.

Section 10

National Safety Code Monitoring Report

INTRODUCTION TO SECTION 10

This section indicates commercial vehicle involvement in collisions. The table on page 110 indicates the type and number of commercial vehicles involved in fatal, injury, and property damage collisions. The table on page 111 indicates the number of individuals killed or injured in collisions involving commercial vehicles.

The National Safety Code vehicle categories include: trucks greater than 4500 kilograms, tractor/semi-trailers, other trucks, school buses, transit buses, intercity buses, and other buses. These vehicles are defined as follows:

Truck greater than 4500 kilograms (unit chassis)- includes all straight trucks with a gross vehicle mass 4,500 kg. and over on the vehicle registration. DOES NOT include truck tractors with a fifth wheel assembly.

Power Unit for Semi-Trailer - truck tractors used for the moving of cargo in or on a trailer by means of a fifth wheel connection. DOES NOT include pickups equipped with a fifth wheel.

Truck (Other) - used if the type and size of truck is unknown.

School Bus - a bus authorized for the transportation of students to or from school and related school activities.

Transit Bus (Urban) - a bus used for commercial carrying of passengers within an urban area.

Inter-City Bus - a bus licenced for inter-city or provincial travel.

Bus (Other) - includes personal use of buses and bus type conversions, but does not include original equipment manufacture type; for example, buses converted to motorhomes.

Those vehicles bearing a National Safety Code Number are entered onto the National Safety Code Collision Monitoring Report.

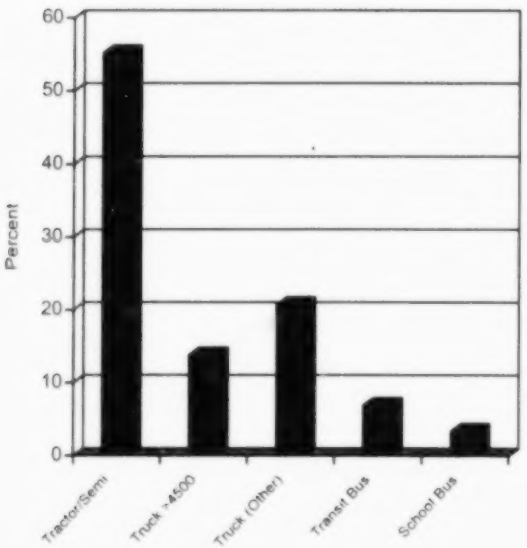
Commercial Vehicle Traffic Collisions[1] by NSC Commercial Vehicle Category and Collision Type 2002

Vehicle Category	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Truck >4500 kg	4	141	509	654	27.0
Tractor/Semi	16	100	375	491	20.2
Truck (Other)	6	261	772	1039	42.8
School Bus	1	14	57	72	3.0
Transit Bus	2	24	32	58	2.4
Intercity Bus	0	22	69	91	3.7
Bus (Other)	0	5	16	21	0.9
Total	29	567	1830	2426	100.0

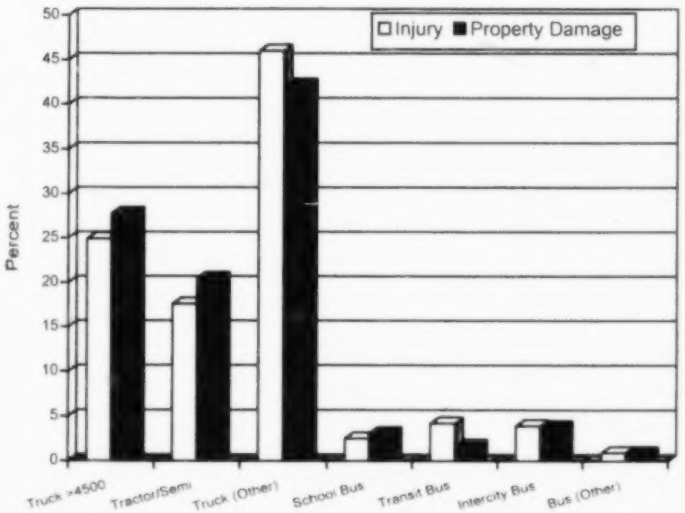
[1]Chart presents the number of commercial vehicles involved in traffic accidents by NSC vehicle category.

Percentage Comparison of Commercial Vehicle Collisions by NSC Commercial Vehicle Category and Collision Type 2002

Fatal



Injury and Property Damage

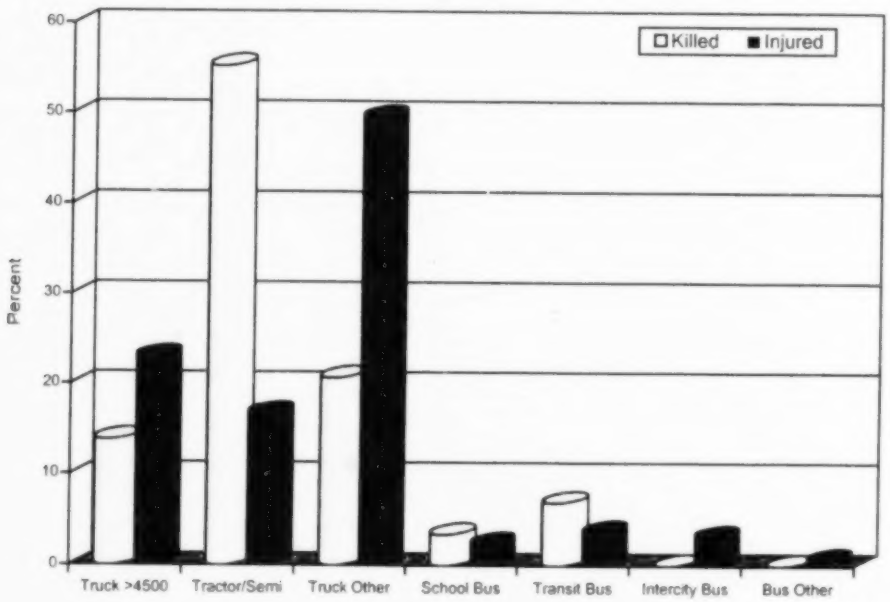


Commercial Vehicle Traffic Collision Victims[1] by NSC Commercial Vehicle Category and Injury Type 2002

Vehicle Category	Injury Type		Total	%
	Killed	Injured		
Truck >4500 kg	4	196	200	22.8
Tractor/Semi	16	142	158	18.0
Truck (Other)	6	421	427	48.8
School Bus	1	21	22	2.5
Transit Bus	2	32	34	3.9
Intercity Bus	0	28	28	3.2
Bus (Other)	0	7	7	0.8
Total	29	847	876	100.0

[1]Chart presents the number of people killed or injured when a commercial vehicle was involved in traffic accidents by NSC vehicle category.

Comparison of Commercial Vehicle Traffic Collision Victims by NSC Commercial Vehicle Category and Injury Type 2002



Commercial Vehicle Involvement in Traffic Collisions by Pre-Collision Activity and Collision Type 2002

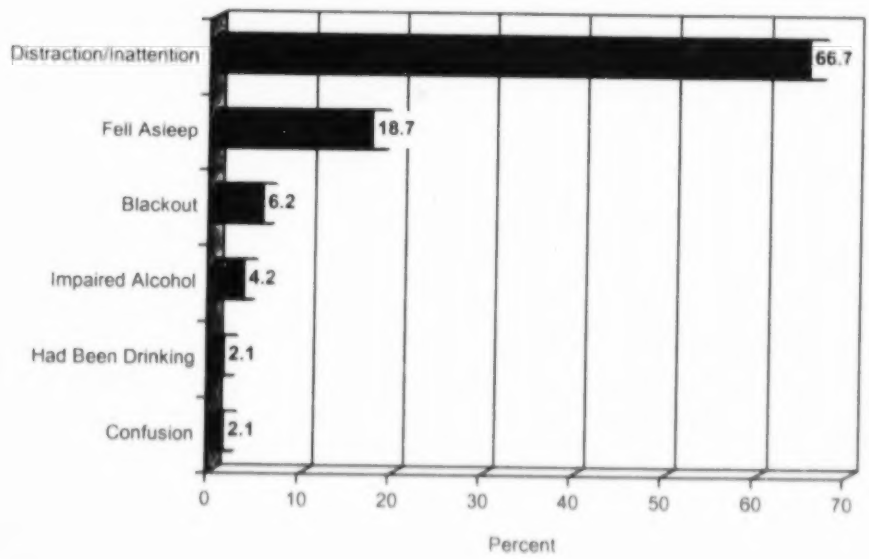
Pre-Collision Activity	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Going Straight Ahead	16	162	423	601	43.3
Turning Left	3	39	92	134	9.7
Turning Right	0	16	96	112	8.1
Making U Turn	0	0	4	4	0.3
Changing Lanes – Left	0	4	11	15	1.1
Changing Lanes – Right	0	3	24	27	2.0
Merging	1	2	4	7	0.5
Reversing	0	4	74	78	5.6
Overtaking	0	2	7	9	0.6
Slowing/Stopping on Roadway	0	8	20	28	2.0
Stopped in Traffic	1	15	54	70	5.1
Starting in Traffic	0	2	7	9	0.6
Leave Parking Position/Roadside	1	1	5	7	0.5
Enter Parking Position/Roadside	0	3	6	9	0.6
Parked Legally	0	3	47	50	3.6
Parked Illegally	0	0	2	2	0.2
Swerving	1	1	7	9	0.6
Not Applicable	0	41	175	216	15.6
Total	23	306	1058	1387	100.0

Of the total NSC vehicles involved in traffic collisions, 43.3% (601) were moving "straight ahead" when accident involvement occurred, 17.8% (246) were "turning left/right" and 5.6% (78) were "reversing".

Commercial Driver Involvement in Traffic Collisions by At-Fault Human Condition and Collision Type 2002

Human Condition	Collision Type			Total	%
	Fatal	Injury	P. Damage		
Apparently Normal	14	169	502	685	49.4
Blackout	0	1	2	3	0.2
Fell Asleep	1	4	4	9	0.7
Confusion/Inability to remember	0	0	1	1	0.1
Ability Impaired – Alcohol	0	0	2	2	0.1
Had Been Drinking/Suspected Alcohol Use	0	0	1	1	0.1
Distraction/Inattention	0	11	21	32	2.3
Not Stated	8	121	525	654	47.1
Total	23	306	1058	1387	100.0

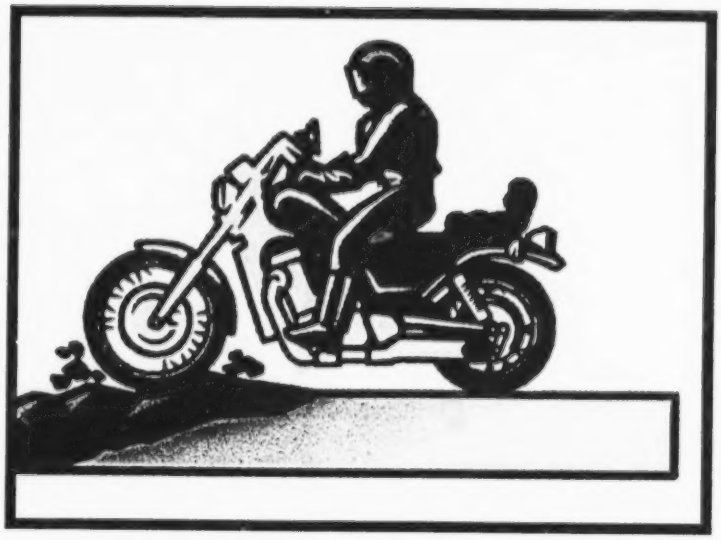
Distribution of At-Fault Human Condition Factors in Commercial Vehicle Traffic Collisions 2002



Known at-fault human condition factors accounted for 48 (3.5%) of the total commercial driver involvement in traffic collisions.

Section 11

Off-Road Vehicle Collisions



Collision Summary
1993 – 2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total Collisions	115	97	141	128	139	123	110	116	113	100
Fatal	3	9	11	7	12	10	8	9	9	4
Injury	78	59	84	84	87	64	76	64	72	62
Property Damage	34	29	46	37	40	49	26	43	32	34
Total Victims	104	82	114	110	127	94	104	89	99	91
Killed	3	9	11	8	15	10	8	10	10	5
Injured	101	73	103	102	112	84	96	79	89	86
Total Vehicles Involved	166	127	198	181	193	160	142	164	151	129
Fatal	5	11	16	8	21	13	9	17	13	8
Injury	117	78	110	118	116	83	99	85	95	73
Property Damage	44	38	72	55	56	64	34	62	43	48
Total Drivers Involved	160	122	192	174	181	159	139	163	141	127
Fatal	5	11	16	8	19	12	9	15	13	7
Injury	116	76	106	116	108	83	97	84	87	73
Property Damage	39	35	70	50	54	64	33	64	41	47

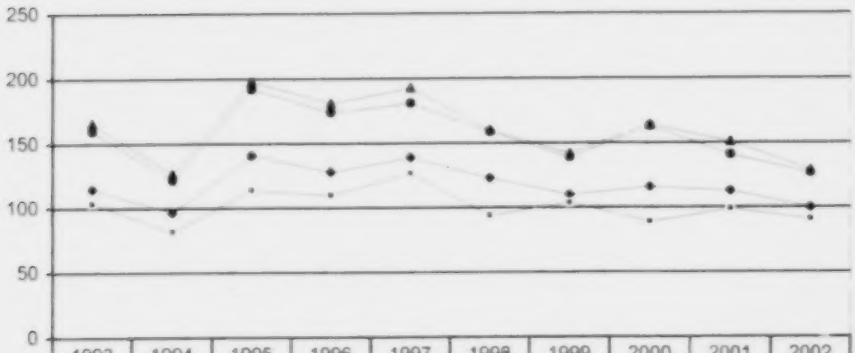
Total accidents decreased by 11.5%, from 113 in 2001 to 100 in 2002. Fatal accidents decreased from 9 to 4. Injury collisions (72 to 62) decreased by 13.9% while property damage collisions (32 to 34) increased by 6.2%.

The overall number of collision victims decreased by 8.1% from 99 in 2001 to 91 in 2002. The number of victims killed decreased from 10 to 5. Victims injured decreased by 3.4% from 89 in 2001 to 86 in 2002.

There were a total of 129 off-road vehicles involved in collisions in 2002, 14.6% less than the 151 recorded in 2001. The number of off-road vehicles involved in fatal accidents decreased from 13 in 2001 to 8 in 2002. Those involved in injury collisions decreased by 23.2% from 95 in 2001 to 73 in 2002. Property damage vehicle involvement increased by 11.6% from 43 in 2001 to 48 in 2002.

The overall number of drivers involved in off-road vehicle collisions decreased by 9.9% from 141 in 2001 to 127 in 2002. The number of drivers involved in fatal collisions decreased from 13 in 2001 to 7 in 2002. Drivers involved in injury collisions decreased by 16.1% from 87 in 2001 to 73 in 2002. Drivers involved in property damage collisions increased from 41 in 2001 to 47 in 2002, a 14.6% increase.

Comparison of Total Off-Road Vehicle Collisions by Collision Victims, Vehicle and Driver Involvement 1993 – 2002



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Collisions	115	97	141	128	139	123	110	116	113	100
Victims	104	82	114	110	127	94	104	89	99	91
Vehicles	166	127	198	181	193	160	142	164	151	129
Drivers	160	122	192	174	181	159	139	163	141	127

Collision Summary
by Vehicle Involvement
2002

	Snowmobile	ATV[1]	Motorcycle	Other[2]	Total
Total Collisions	63	15	5	17	100
Fatal	1	0	0	3	4
Injury	41	9	5	7	62
Property Damage	21	6	0	7	34
Total Victims	52	11	6	22	91
Killed	1	0	0	4	5
Injured	51	11	6	18	86
Total Vehicles Involved	76	21	9	23	129
Fatal	1	0	3	4	8
Injury	48	11	6	8	73
Property Damage	27	10	0	11	48
Total Drivers Involved	75	20	8	24	127
Fatal	2	0	2	3	7
Injury	45	12	6	10	73
Property Damage	28	8	0	11	47

[1]ATV (All Terrain Vehicles) includes 3, 4 and 6 wheel types.

[2]Vehicles not registered as an off-road vehicle, including not stated category.

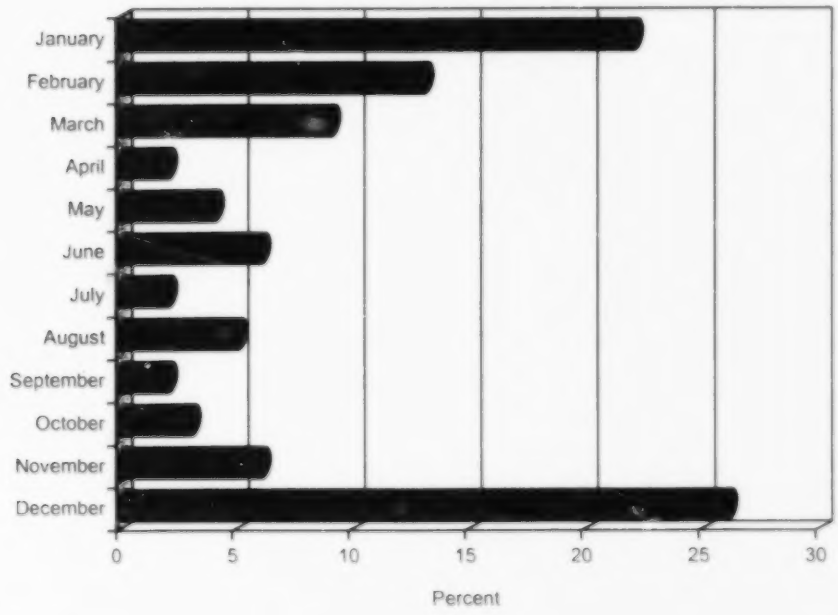
Snowmobiles accounted for 63.0% of total off-road collisions, 57.1% of all victims, 58.9% of all vehicles involved, and 59.1% of all drivers involved.

Collision Summary
By Month of Occurrence and Collision Type
2002

Month	Collision Type			Total	%
	Fatal	Injury	Property Damage		
January	1	14	7	22	22.0
February	0	7	6	13	13.0
March	0	3	6	9	9.0
April	0	2	0	2	2.0
May	0	3	1	4	4.0
June	0	4	2	6	6.0
July	2	0	0	2	2.0
August	0	4	1	5	5.0
September	0	1	1	2	2.0
October	0	2	1	3	3.0
November	0	5	1	6	6.0
December	1	17	8	26	26.0
Total	4	62	34	100	100.0

Of 100 off-road vehicle collisions, 26 occurred in December and 22 in January. Two of four fatal collisions occurred in July and the remaining two in January and December. In contrast, the greatest number of injury collisions occurred in the winter months of December and January which accounted for 17 and 14 respectively.

Distribution of Total Off-Road Vehicle Collisions
by Month of Occurrence
2002

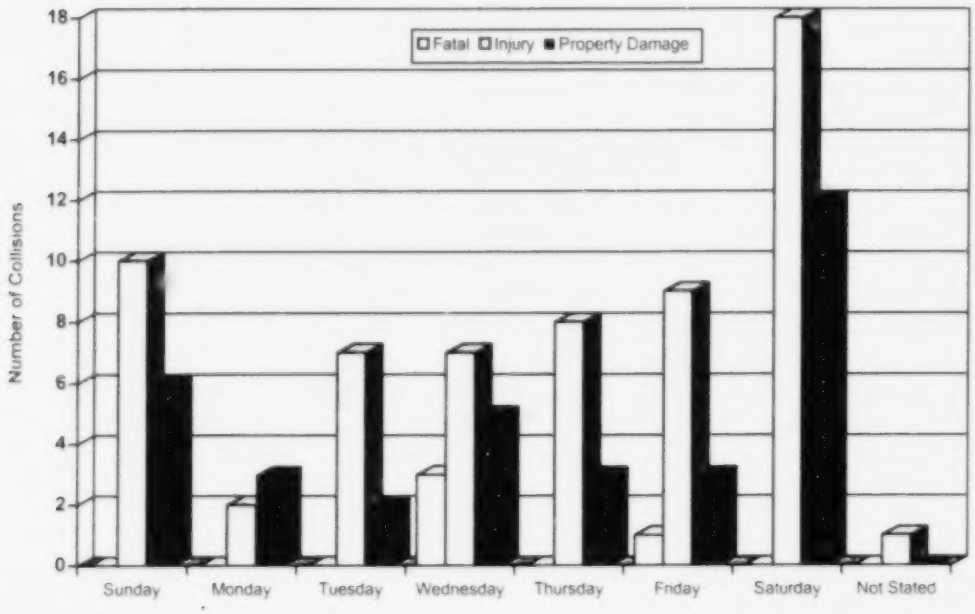


Collision Summary
By Day of Occurrence and Collision Type
2002

Day	Collision Type			Total	%
	Fatal	Injury	Property Damage		
Sunday	0	10	6	16	16.0
Monday	0	2	3	5	5.0
Tuesday	0	7	2	9	9.0
Wednesday	3	7	5	15	15.0
Thursday	0	8	3	11	11.0
Friday	1	9	3	13	13.0
Saturday	0	18	12	30	30.0
Not Stated	0	1	0	1	1.0
Total	4	62	34	100	100.0

Collisions which resulted in deaths occurred more frequently on Wednesday (3) and Friday (1) while no fatal collisions took place from Saturday to Tuesday. Off-road injury collisions happened most often on Saturday (18) and Sunday (10) while these crashes occurred least often on Mondays, at 3.2%.

Comparison of Off-Road Vehicle Collisions
by Day of Occurrence and Collision Type
2002

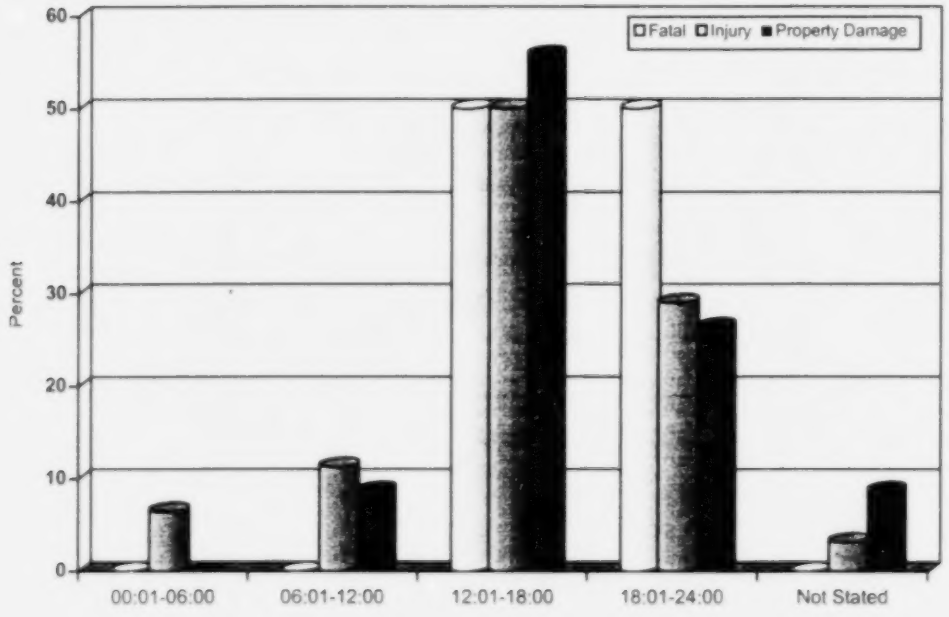


Collision Summary
By Time of Occurrence and Collision Type
2002

Time	Collision Type			Total	%
	Fatal	Injury	Property Damage		
00:01 – 06:00	0	4	0	4	4.0
06:01 – 12:00	0	7	3	10	10.0
12:01 – 18:00	2	31	19	52	52.0
18:01 – 24:00	2	18	9	29	29.0
Not Stated	0	2	3	5	5.0
Total	4	62	34	100	100.0

The primary periods for off-road vehicle collisions were between 12:01 – 18:00 (52.0%) and 18:01 – 24:00 (29.0%).

Comparison of Total Off-Road Vehicle Collisions
by Time of Occurrence and Collision Type
2002

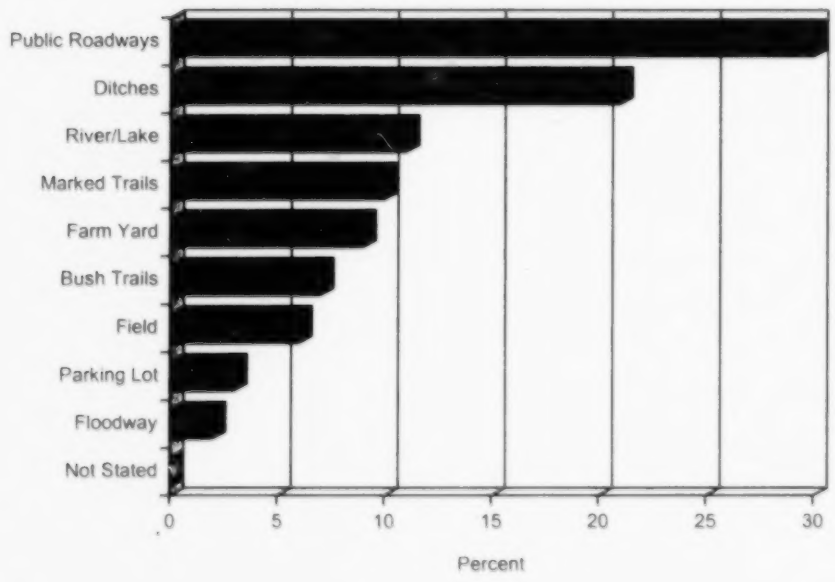


Collision Summary
By Location
2002

Location	Collision Type			Total	%
	Fatal	Injury	Property Damage		
Public Roadway	3	16	11	30	30.0
Ditches	0	12	9	21	21.0
River/Lake	0	6	5	11	11.0
Field	0	4	2	6	6.0
Bush Trails/Winter Road	0	6	1	7	7.0
Farm Yard/Private Property	0	8	1	9	9.0
Marked/Groom Trails	1	6	3	10	10.0
Parking Lot	0	2	1	3	3.0
Lakeshore	0	0	1	1	1.0
Floodway/Diversion	0	2	0	2	2.0
Not Stated	0	0	0	0	0.0
Total	4	62	34	100	100.0

"Public roadways" (30.0%), "ditches" (21.0%), and "river-lake" (11.0%) were the most frequently identified locations of off-road vehicle collisions.

Distribution of Total Off-Road Vehicle Collisions
by Collision Location
2002



Off-Road Vehicle Collision Victims by Age Group, Injury Type, and Sex 2002

Age Group	Injury Type						Total Victims
	Killed			Injured			
	Male	Female	Total	Male	Female	Total	
0-4	0	0	0	1	0	1	1
5-9	0	0	0	1	3	4	4
10-14	0	0	0	4	2	6	6
15-19	1	1	2	18	8	26	28
20-24	0	1	1	3	1	4	5
25-34	1	0	1	11	5	16	17
35-44	1	0	1	12	4	16	17
45-54	0	0	0	5	2	7	7
55-64	0	0	0	3	0	3	3
65>	0	0	0	1	0	1	1
Not Stated	0	0	0	1	1	2	2
Total	3	2	5	60	26	86	91

Male victims made up 69.2% (63) of all persons killed or injured, whereas females made up 30.8% (28). Of 91 victims, the 15-19 age group accounted for the highest percentage, at 30.8% (28). They were followed by the age groups 25-34 and 35-44, each at 18.7% (17).

Off-Road Vehicle Collision Victims by Safety Equipment and Injury Type 2002

Safety Equipment	Injury Type		Total Victims
	Killed	Injured	
Safety Helmet Worn	2	30	32
Safety Helmet Not Worn	3	26	29
Not Stated	0	13	13
Not Applicable[1]	0	17	17
Total	5	86	91

[1]Does not apply to victims who were not driver/occupants of off-road vehicles

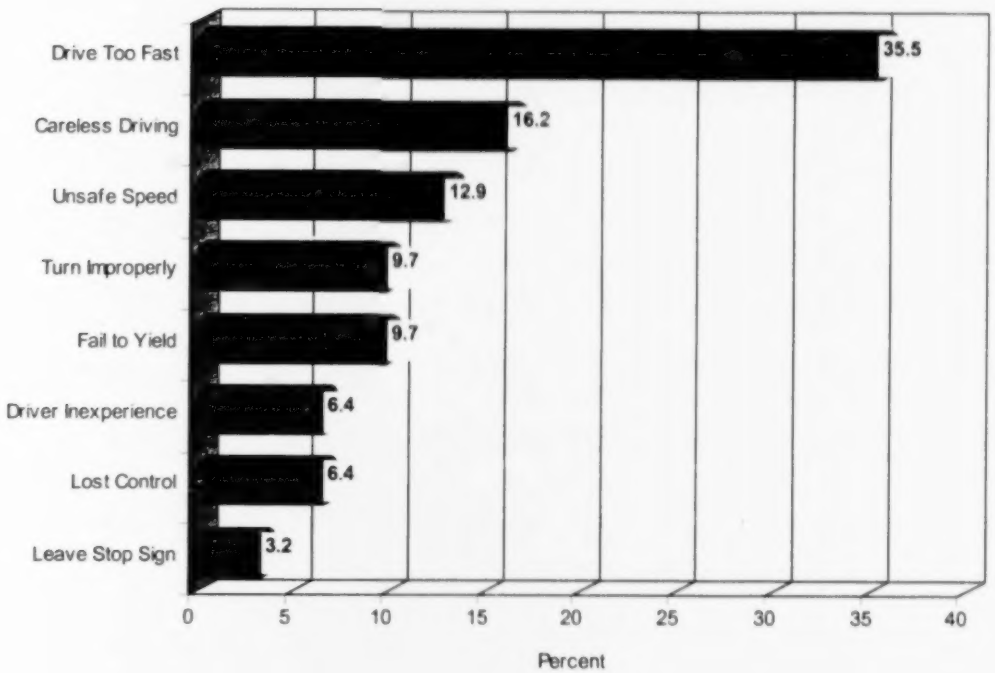
Of the total number of off-road vehicle collision victims, 31.9% (29) were reported as not wearing a safety helmet at time of collision occurrence. Safety helmet usage was unknown for a further 14.3% (13) of the victims.

Driver Involvement
by Driver Action and Collision Type
2002

Driver Action	Collision Type			Total	%
	Fatal	Injury	Property Damage		
Drive Properly [1]	3	42	29	74	58.2
Follow Too Closely	0	0	0	0	0.0
Turn Improperly	0	1	2	3	2.4
Drive Too Fast For Conditions	0	9	2	11	8.7
Unsafe Operating Speed	1	2	1	4	3.1
Fail to Yield	1	1	1	3	2.4
Disobey Traffic Control	0	0	0	0	0.0
Drive Wrong Way	0	0	0	0	0.0
Back Unsafely	0	0	0	0	0.0
Careless Driving	0	3	2	5	3.9
Lost Control/Drive off Roadway	0	2	0	2	1.6
Take Avoiding Action	0	0	0	0	0.0
Driver Inexperience	0	1	1	2	1.6
Leave stop sign before safe	0	1	0	1	0.8
Not Stated	2	11	9	22	17.3
Total	7	73	47	127	100.0

[1] No apparent improper driving action.

Comparison of At-Fault Driver Actions
in Off-Road Vehicle Collisions
2002



At-fault driver actions accounted for 31 (24.5%) of all driver actions resulting in off-road vehicle collisions. Of these at-fault driving actions, "driving too fast for conditions" (35.5%), "careless driving" (16.2%), and "unsafe operating speed" (12.9%) were the most frequently identified driver actions contributing to off-road vehicle collisions.

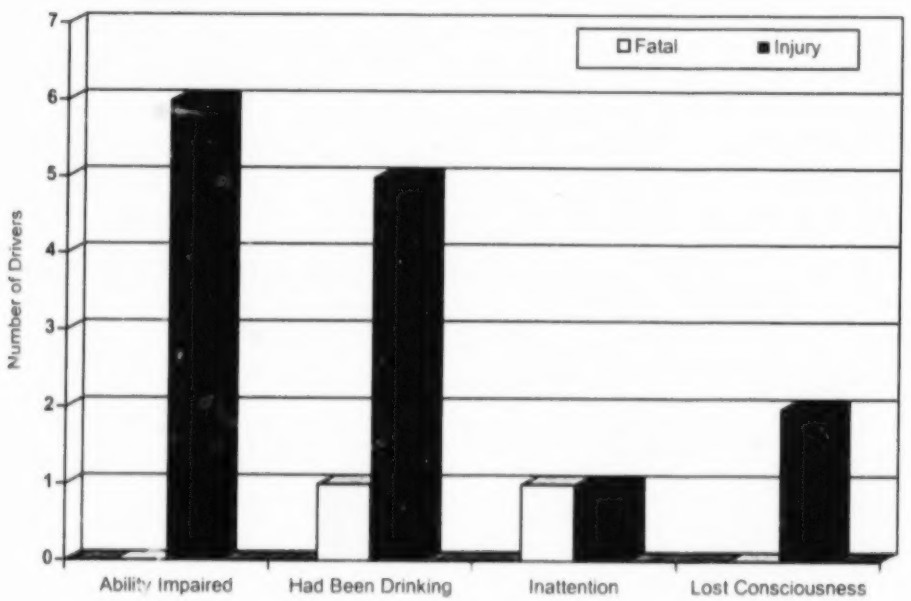
Driver Involvement
by At-Fault Human Condition Factors and Collision Type
2002

Human Condition	Collision Type			Total	%
	Fatal	Injury	Property Damage		
Apparently Normal	5	58	46	109	85.8
Distraction/Inattention	1	1	0	2	1.6
Ability Impaired by Alcohol	0	6	1	7	5.5
Had Been Drinking/Suspected Alcohol Use[1]	1	5	0	6	4.7
Lost Consciousness	0	2	0	2	1.6
Not Stated	0	1	0	1	0.8
Total	7	73	47	127	100.0

[1] These statistics are understated and represent only those collisions where alcohol involvement was apparent.

Of the 127 drivers involved in off-road vehicle collisions, 17 or 13.4% were known to have at-fault human condition factors. Of the 7 drivers involved in fatal off-road vehicle collisions, 2 were known to have at-fault human condition factors. Overall, "ability impaired by alcohol" and "had been/suspected alcohol use" were reported as the most common at-fauit human condition factors.

Comparison of At-Fault Human Condition Factors
by Fatal and Injury Collision Type
2002

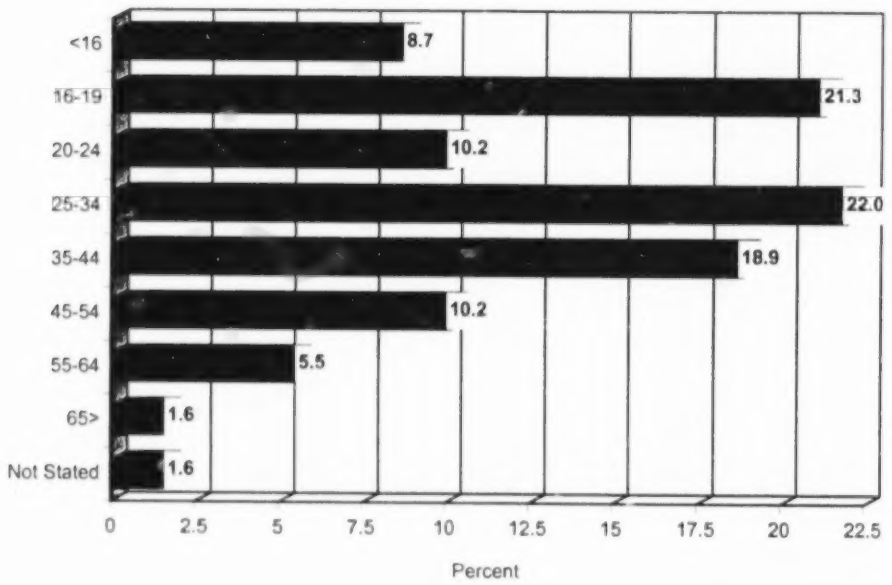


Driver Involvement by Age Group and Collision Type 2002

Age Group	Collision Type			Total	%
	Fatal	Injury	Property Damage		
<16	1	7	3	11	8.7
16-19	2	19	6	27	21.3
20-24	0	4	9	13	10.2
25-34	1	15	12	28	22.0
35-44	2	16	6	24	18.9
45-54	0	7	6	13	10.2
55-64	1	3	3	7	5.5
65>	0	1	1	2	1.6
Not Stated	0	1	1	2	1.6
Total	7	73	47	127	100.0

Of the total number of drivers involved in off-road vehicle collisions, 22.0% were aged 25-34, 21.3% were 16-19, and 18.9% were aged 35-44.

Distribution of Total Driver Involvement in Off-Road Vehicle Collisions by Age Group 2002



Section 12

Alcohol-Related Criminal Code Offences

Total Alcohol-Related Criminal Code Offences by Accident/No Accident Involvement 1984 – 2001[1]

Year	Alcohol Content Over .08		Impaired Driving				Refuse Sample		Total
	253-B		253-A		255-2	255.3	254-5		
	No Accident	With Accident	No Accident	With Accident	Injury	Death	No Accident	With Accident	
1984	4045	525	461	100	0	0	501	95	5727
1985	4110	543	474	133	0	0	587	80	5927
1986	3802	528	490	132	22	4	560	113	5651
1987	3699	580	503	120	29	2	563	108	5604
1988	3395	535	467	146	33	2	559	115	5252
1989	3392	494	370	110	33	6	484	95	4984
1990	3276	421	332	73	28	2	411	73	4616
1991	3339	373	321	52	44	2	398	62	4591
1992	2683	335	269	55	41	3	321	45	3752
1993	2210	308	282	52	29	3	274	59	3217
1994	2208	308	344	61	34	2	292	70	3319
1995	2298	180	366	39	25	3	227	37	3175
1996	2133	134	303	31	24	0	227	23	2875
1997	2378	141	338	28	37	3	250	27	3202
1998	2413	74	377	27	36	1	274	17	3219
1999	2400	60	423	18	29	3	309	11	3253
2000	1945	14	488	5	34	4	241	4	2735
2001	1780	3	568	6	35	2	185	1	2580
% Change 00-01	-8.5	[2]	16.4	[2]	2.9	[2]	-23.2	[2]	-5.7

[1]Driver and Vehicle Licencing's alcohol statistic collection is structured to accommodate a "two-year" updating period due to a potential backlog in the court process. Consequently, there is a one-year delay in reporting alcohol statistics.

[2]Percentage change statistics not calculated due to low frequency count.

Overall, there has been a 54.3% decrease in the number of alcohol-related Criminal Code offences between 1986 and 2001, 5,651 to 2,580 respectively. Possible reasons for the decrease include the introduction of stiffer penalties in 1986 and Manitoba's countermeasure program in 1989. These penalties may have accounted for an immediate 4.7% (276) decrease between 1985 and 1986, and a further decrease of 11.8% (667) between 1986 and 1989. Manitoba's countermeasure program may also have initiated a decrease of 7.4% (368) from 4,984 in 1989 to 4,616 in 1990 and a further 44.4% (2,036) decline to 2,580 in 2001. The level of law enforcement may also be a factor.

Total Alcohol-Related Criminal Code Offences[1] by Age Group 1987-2001

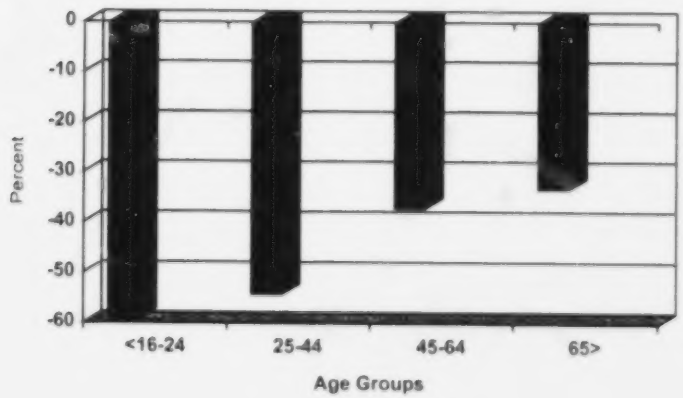
Age Group	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	% Change 87-01
<16	12	6	9	10	12	4	7	5	3	7	7	7	13	12	11	[2]
16-17	169	156	124	119	104	86	64	49	82	66	105	109	81	75	91	-46.2
18-20	784	654	622	583	520	426	286	363	364	366	430	349	412	345	357	-54.5
21-24	1093	945	909	744	709	606	494	473	471	388	495	448	504	430	379	-65.3
25-29	1061	1066	983	940	923	667	584	553	518	447	451	495	484	396	384	-63.8
30-34	801	745	755	704	728	624	543	566	547	394	440	459	445	368	334	-58.3
35-39	541	552	516	538	527	431	402	435	422	387	440	455	429	354	322	-40.5
40-44	441	416	392	341	389	365	292	288	278	267	302	306	330	298	259	-41.3
45-49	254	271	242	223	240	206	194	205	177	208	201	227	248	198	177	-30.3
50-54	179	174	163	179	176	129	146	138	111	151	130	163	151	102	128	-28.5
55-59	125	130	133	92	110	83	79	88	86	71	78	82	56	66	54	-56.8
60-64	84	83	65	73	71	62	67	86	59	66	50	49	46	42	44	-47.6
65-69	38	38	46	46	47	42	31	42	33	32	44	39	28	23	22	-42.1
70-74	14	12	19	19	26	13	22	24	11	10	18	25	15	14	15	[2]
75>	8	4	6	5	9	8	6	4	13	15	11	6	11	12	3	[2]
Total	5604	5252	4984	4616	4591	3752	3217	3319	3175	2875	3202	3219	3253	2735	2580	-54.0

[1] Includes alcohol content over .08, impaired driving causing injury and/or death, and refuse sample.

[2] Percentage change statistics not calculated due to low frequency count.

Between 1987 and 2001, the number of alcohol related Criminal Code offences declined substantially by 54.0% from 5,604 to 2,580. All age groups between 16 and 69 recorded declines in total alcohol-related Criminal Code offences between 1987 and 2001. These ranged from substantial declines of 65.3%, 63.8% and 58.3% for those aged 21-24, 25-29, and 30-34 respectively.

Comparison of Percentage Change Statistics by Selected Age Groups 1987 - 2001



Comparison of Alcohol-Related Criminal Code Offences by Active Licenced Drivers and Selected Age Group 1986, 1990 and 2001[1]

Age Group	1986			1990			2001		
	Total Alcohol	% Total Alcohol	% Active Licenced Drivers	Total Alcohol	% Total Alcohol	% Active Licenced Drivers	Total Alcohol	% Total Alcohol	% Active Licenced Drivers
16-24[2]	2090	37.0	19.1	1456	31.5	16.3	838	32.5	14.6
25-44	2837	50.2	45.6	2523	54.6	46.4	1299	50.3	38.8
45-64	661	11.7	24.4	567	12.3	25.0	403	15.6	32.5
65>	63	1.1	10.9	73	1.6	12.3	40	1.6	14.1
Total	5651	100.0	100.0	4619	100.0	100.0	2580	100.0	100.0

[1]Years chosen to reflect changes to Criminal Code penalties and the introduction of Manitoba's countermeasure program.
[2]Includes statistics for individuals <16 who were convicted of alcohol-related Criminal Code offence but who are not licenced drivers.

The percentage of alcohol-related Criminal Code alcohol offences accounted for by drivers under age 25 is consistently double their portion of the licenced driver population. The percentage of total offences held by drivers aged 25-44 ranges from 10-30% higher than their portion of the licenced driver population. In sharp contrast, drivers aged 45-64 account for a share of offences about 50% below their percentage of licenced drivers.

Licenced drivers up to the age of 24 consistently record the highest rate of Criminal Code alcohol offences. Although accounting for 19.1% of all licenced drivers in 1986, they committed 37.0% of all offences. In 2001, they accounted for 14.6% of licenced drivers and 32.5% of offences.

Drivers between the ages of 25 to 44 years continue to record the highest incidence of alcohol-related Criminal Code offences and the highest percentage of licenced drivers. In the years 1986, 1990, and 2001 respectively, drivers in this group made up 45.6%, 46.4% and 38.8% of licenced drivers and 50.2% (2,837), 54.6% (2,523) and 50.3% (1,299) of Criminal Code offences.

Drivers in the age group 45-64 made up 24.4%, 25.0% and 32.5% of licenced drivers and 11.7% (661), 12.3% (567) and 15.6% (403) of Criminal Code offences in 1986, 1990 and 2001 respectively.

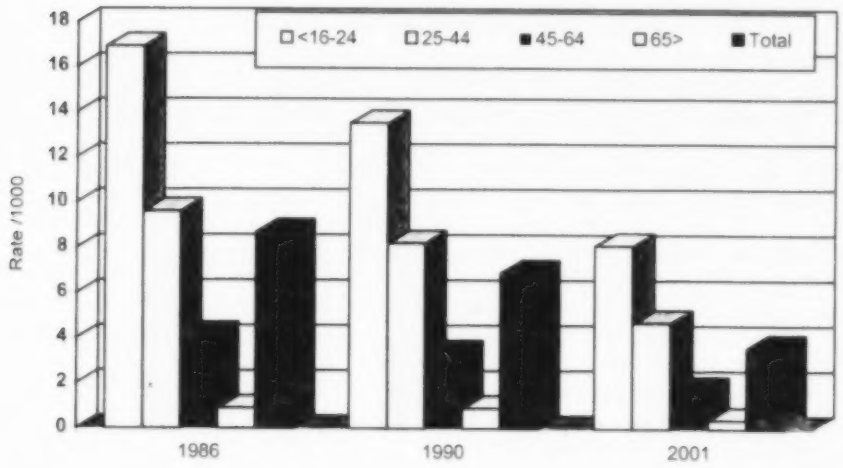
Older drivers are less likely to be involved in alcohol-related Criminal Code offences. Drivers over 64 made up 10.9%, 12.3% and 14.1% of the total licenced drivers but accounted for only 1.1% (63), 1.6% (73) and 1.6% (40) of Criminal Code offences in 1986, 1990 and 2001.

Ratio of Alcohol-Related Criminal Code Offences to Licenced Drivers by Selected Age Group 1986, 1990 and 2001

Age Group	1986			1990			2001		
	Alcohol Offences [1]	Licenced Drivers	Rate /1000	Alcohol Offences	Licenced Drivers	Rate /1000	Alcohol Offences	Licenced Drivers	Rate /1000
<16-24	2090	123707	16.9	1456	108060	13.5	838	102871	8.1
25-44	2837	294105	9.6	2523	308301	8.2	1299	273981	4.7
45-64	661	157412	4.2	567	166000	3.4	403	227452	1.8
65>	63	70251	0.9	73	82203	0.9	40	106152	0.4
Total	5651	645475	8.7	4619	664564	6.9	2580	710456	3.6

[1] *For comparative purposes the report assumes each alcohol-related Criminal Code conviction is for a single licenced driver although a single driver may obtain more than one alcohol-related Criminal Code conviction in any given year.*

Comparison of Relative Involvement Rate /1000 by Age Groups 1986, 1990 and 2001



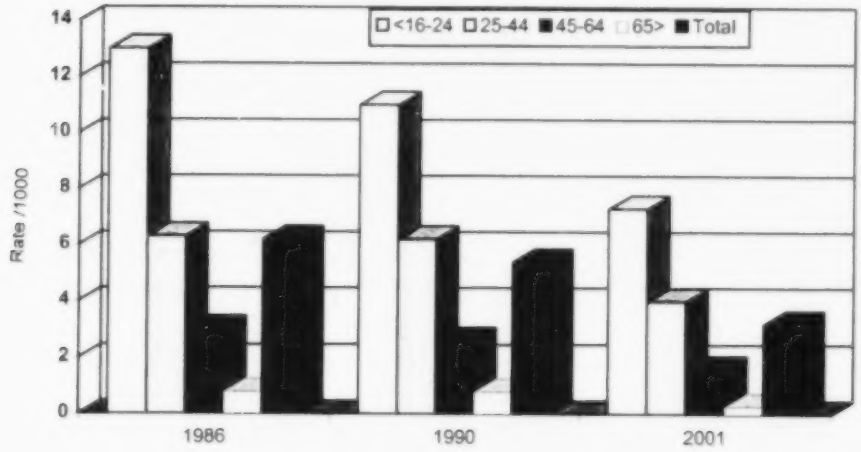
- For the period examined, drivers convicted of alcohol related offences decreased by 54.3% from 5,651 in 1986 to 2,580 in 2001. The driver involvement rate declined by 58.6%, from 8.7/1,000 to 3.6/1,000.
- For every 1,000 licenced drivers aged up to 24, there were 16.9, 13.5 and 8.1 drivers who had committed an alcohol-related Criminal Code offence for each respective year. The 2001 rate for this age group was 52.1% below the 1986 rate.
- The rates for young drivers were about 40% higher than the rates for drivers aged 25-44, 9.6, 8.2, and 4.7, and 75% higher than for drivers aged 45-64, at 4.2, 3.4 and 1.8.
- The 65 and older drivers had the lowest rate of involvement per 1,000 drivers, 0.9 in both 1986 and 1990 and 0.4 in 2001.

Driver Involvement in First Occurrence Alcohol-Related Criminal Code Offences by Age Group 1986, 1990 and 2001

Age Group	1986			1990			2001		
	Alcohol Offences [1]	Licenced Drivers	Rate /1000	Alcohol Offences	Licenced Drivers	Rate /1000	Alcohol Offences	Licenced Drivers	Rate /1000
<16-24	1606	123707	13.0	1185	108060	11.0	752	102871	7.3
25-44	1874	294105	6.3	1917	308301	6.2	1103	273981	4.0
45-64	476	157412	3.0	436	166000	2.6	362	227452	1.6
65>	57	70251	0.8	63	82203	0.8	37	106152	0.3
Total	4013	645475	6.2	3601	664564	5.4	2254	710456	3.2

[1] *For comparative purposes the report assumes each alcohol-related Criminal Code conviction is for a single licenced driver although a single driver may obtain more than one alcohol-related Criminal Code conviction in any given year.*

Comparison of First Occurrence Relative Involvement Rate /1000 by Age Groups 1986, 1990 and 2001



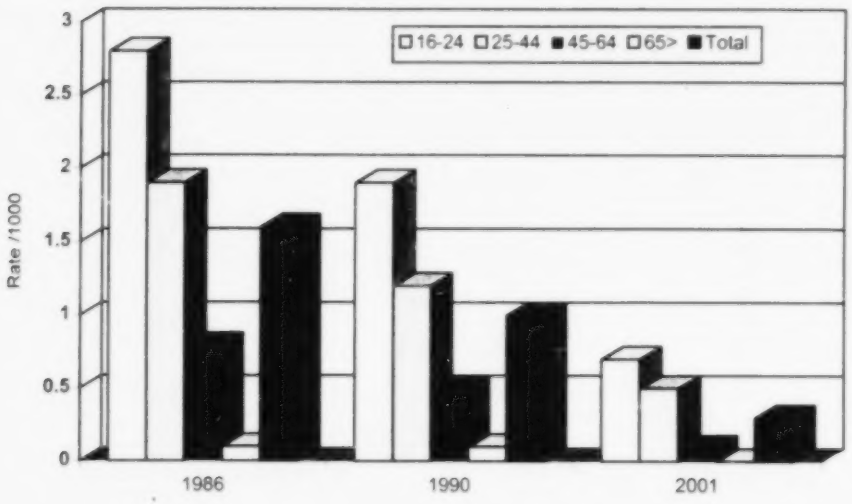
- The number of drivers convicted of first offence alcohol-related convictions decreased by 43.8% from 4,013 in 1986 to 2,254 in 2001.
- Comparing the numbers for 1986 and 2001, there was a 53.2% drop for the <16-24 group, 41.1% decrease for the 25-44 group, 23.9% decrease for the 45-64 age group, and a 35.1% decrease for the 65> age group.
- For every 1,000 licenced drivers within the age range of <16-24, there were 13.0, 11.0 and 7.3 drivers who committed an alcohol-related offence in each respective year. The relative involvement rate for these young drivers is nearly double the rate for the 25-44 year old drivers (6.3, 6.2 and 4.0) and four times as high than drivers in the age group 45-64 (3.0, 2.6 and 1.6). The 65 and older drivers have the lowest rate of involvement per 1,000 drivers, 0.8 in both 1986 and 1990, and 0.3 in 2001.

Driver Involvement in Second Occurrence Alcohol-Related Criminal Code Offences by Age Group 1986, 1990 and 2001

Age Group	1986			1990			2001		
	Alcohol [1] Convictions	Licenced Drivers	Rate /1000	Alcohol Convictions	Licenced Drivers	Rate /1000	Alcohol Convictions	Licenced Drivers	Rate /1000
<16-24	350	123707	2.8	204	108060	1.9	71	102871	0.7
25-44	551	294105	1.9	373	308301	1.2	145	273981	0.5
45-64	121	157412	0.8	88	166000	0.5	27	227452	0.1
65>	4	70251	0.1	6	82203	0.1	2	106152	-.-
Total	1026	645475	1.6	671	664564	1.0	245	710456	0.3

[1] *For comparative purposes, the report assumes each alcohol-related Criminal Code conviction is for a single licenced driver although a single driver may obtain more than one alcohol-related Criminal Code conviction in any given year.*

Comparison of Second Occurrence Relative Involvement Rate /1000 by Age Groups 1986, 1990 and 2001



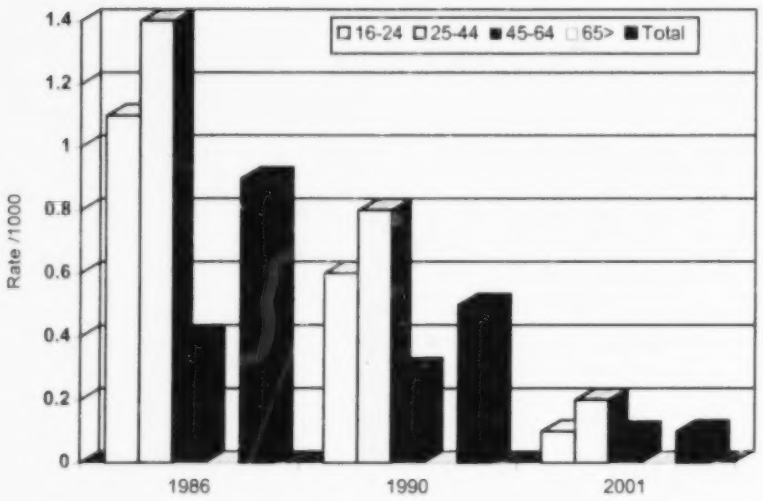
- Overall, the total number of drivers convicted of second offence alcohol-related Criminal Code offences decreased by 76.1% from 1,026 in 1986 to 245 in 2001.
- The rate for drivers in the highest involved age group <16-24 dropped 79.7% from 350 in 1986 to 71 in 2001. Similarly, the second ranked age group 25-44 recorded a 73.7% decrease from 551 in 1986 to 145 in 2001.
- For every 1,000 licenced drivers within the age range of <16-24, there were 2.8, 1.9 and 0.7 drivers who had committed a second alcohol-related Criminal Code offence. In 1986, the relative involvement rate for <16-24 year old drivers was 32.1% greater than the rate for the 25-44 year old licenced drivers and 71.4% greater than the rate for 45-64 year old drivers. In 1990, the rate for <16-24 year old drivers was 36.8% greater than the rate for the 25-44 year old group and 73.7% greater than the rate for the 45-64 age group. In 2001, the relative involvement rate for drivers in the <16-24 age group was 28.6% greater than for the 25-44 age group and 85.7% greater than for the 45-64 age group.
- Drivers over the age of 65 maintained a relative involvement rate of 0.1 per 1,000 drivers for 1986 and 1990. The rate for 2001 was negligible.

Driver Involvement in Third and Subsequent Occurrence Alcohol-Related Criminal Code Offences by Selected Age Group 1986, 1990 and 2001

Age Group	1986			1990			2001		
	Alcohol [1] Convictions	Licenced Drivers	Rate /1000	Alcohol Convictions	Licenced Drivers	Rate /1000	Alcohol Convictions	Licenced Drivers	Rate /1000
<16-24	134	123707	1.1	67	108060	0.6	15	102871	0.1
25-44	412	294105	1.4	233	308301	0.8	51	273981	0.2
45-64	64	157412	0.4	43	166000	0.3	14	227452	0.1
65>	2	70251	-.-	1	82203	-.-	1	106152	-.-
Total	612	645475	0.9	344	664564	0.5	81	710456	0.1

[1] *For comparative purposes, the report assumes each alcohol-related Criminal Code conviction is for a single licenced driver, although a single driver may obtain more than one alcohol-related Criminal Code conviction in any given year.*

Comparison of Third and Subsequent Occurrence Relative Involvement Rate /1000 by Selected Age Groups 1986, 1990 and 2001



- The total number of drivers convicted of third and subsequent occurrence alcohol-related Criminal Code offences decreased by 86.8% from 612 in 1986 to 81 in 2001.
- Drivers in the age group 25-44 recorded the highest involvement rate. However, the number involved declined by 87.6% from 412 in 1986 to 51 in 2001. The <16-24 age group, which had the second highest involvement rate, decreased by 88.8% from 134 to 15.
- The third highest age group 45-64 decreased by 78.1% from 64 in 1986 to 14 in 2001.

Total Alcohol-Related Criminal Code Offences by Age Group and Conviction Type 2001*

Age Group	Alcohol Content Over .08		Impaired Driving				Refuse Sample		Total
	253-B		253-A		255-2	255-3	254-5		
	No Accident	With Accident	No Accident	With Accident	Injury	Death	No Accident	With Accident	
<16	10	0	1	0	0	0	0	0	11
16-17	60	0	21	0	1	0	9	0	91
18-20	263	0	73	0	8	0	13	0	357
21-24	276	0	74	1	11	0	17	0	379
25-29	284	1	71	1	9	0	18	0	384
30-34	214	1	82	1	3	0	32	1	334
35-39	216	1	74	2	2	0	27	0	322
40-44	164	0	57	1	1	2	34	0	259
45-49	121	0	39	0	0	0	17	0	177
50-54	91	0	29	0	0	0	8	0	128
55-59	31	0	19	0	0	0	4	0	54
60-64	25	0	13	0	0	0	6	0	44
65-69	15	0	7	0	0	0	0	0	22
70-74	9	0	6	0	0	0	0	0	15
75>	1	0	2	0	0	0	0	0	3
Total	1780	3	568	6	35	2	185	1	2580

** Driver and Vehicle Licencing's alcohol statistics collection is structured to accommodate a "two year" updating period due to a potential backlog in the court process. Consequently, there is a one-year delay in reporting alcohol statistics.*

Glossary

Ability Impaired by Alcohol	Driver had consumed a sufficient quantity of alcohol to impair their physical/mental condition.
Ability Impaired by Drugs	Driver had used a controlled substance and was legally impaired in the judgement of a law enforcement officer.
Accident	Refer to collision.
All-terrain Vehicle	An off-road vehicle which operates on three or more low pressure tires, has a seat designed to be straddled by the operator, and has handle bars for steering the vehicle.
Antique Vehicle	A car, truck or motorcycle that is more than thirty years old at the time of application for registration. A motor vehicle registered as an antique car, truck or motorcycle can be driven only when: a. taking it to be repaired or serviced; b. displaying it to the public in a parade or procession and driving it to or from such a parade or procession, c. driving it in an antique car, truck or motorcycle rally as authorized by the Registrar of Motor Vehicles.
Collision	A reportable motor vehicle collision is one that results in a fatality, injury and/or total property damage exceeding $1,000.00.
Coll/mve	Collision per million vehicles entering.
Commercial Truck	A truck (or trailer) used to transport the registered owner's (or lessee's) own business goods: a. beyond a radius of 20 kilometres of the City of Winnipeg, where the registered owner's business address is in the City of Winnipeg, b. beyond a radius of 30 kilometres of a city, town or village other than the City of Winnipeg, where the registered owner's address is not in the City of Winnipeg.
Contributing Factors	Those events or circumstances that directly contribute to a traffic collision: Driver Action: Used to determine if the actions performed immediately prior to the collision may have been a factor in causing the collision.

Contributing Factors con't	Those events or circumstances that directly contribute to a traffic collision: Human Condition: Used to determine if a driver's medical condition may have been a major factor in contributing to collision causation. Vehicle Condition: Used to determine if a vehicle has a mechanical defect that may have been a factor in collision causation. Environmental Condition: Used to determine if environmental factors are in some way responsible for the collision.
Dealer	A recognized person who in the course of his business buys, sells, exchanges, advertises, exhibits or offers for sale, or acts as a broker of, or commission agent in respect of new or used vehicles of a type required to be registered under *The Highway Traffic Act* and/or *The Taxicab Act*, and as such, is allowed to purchase for their own use dealer licence plates that can be affixed to a motor vehicle under their care.
Driverless Vehicle/ Ran Out of Control	Includes improperly parked vehicles, vehicles set in motion by failure of parking brakes, vandalism, etc., without a driver in control. Includes cases where young children start and/or attempt to operate vehicles.
Farm Truck	A motor vehicle classified as a "truck" at time of registration and is owned by a person engaged in farming.
Fatal Collision	A motor vehicle collision which results in death to one or more individuals within 30 days of the collision.
Had Been Drinking/ Suspected Alcohol Use	Driver had consumed alcohol, but his/her physical condition was not legally impaired or tested for legal impairment.
Hydroplaning of tires	Refers to water on the roadway. The contact between the vehicle's tires and the roadway surface was eliminated.

Injury Collision	A motor vehicle collision which results in non-fatal injury to one or more individuals.
Livery	A vehicle licenced under *The Highway Traffic Act* for the transportation of persons for compensation and is licenced to operate in the Province according to terms issued by the Motor Transport Board.
Moped	A motor vehicle which: a. has 2 tandem wheels or 3 wheels, each of which is more than 250 millimetres in diameter, b. has a seat or saddle having a minimum unladen height of 650 millimetres, when measured from the ground level to the top of the forward most part of the saddle, c. is capable of being driven at all times by pedals only if so equipped, by motor only or by both pedals and motor, and d. the motor has a piston displacement of not more than 50 cubic centimetres, or is an electric motor neither of which is capable of enabling the moped to attain a speed greater than 50 km/h.
Motorcycle	A motor vehicle, other than a tractor which: a. is designed to travel on not more than three wheels in contact with the ground, and b. has a seat or saddle for the use of the rider sitting astride thereof and is capable of attaining a speed of 50 km/h or more, c. and includes a bicycle with a motor attached by which it is driven, a motor scooter.
Not Stated	Reporting document does not contain the necessary information for a particular category.
Off-Road Vehicle (ORV)	Included in this category are the following: snowmobiles, off-road vehicle motorcycles, all-terrain vehicles, amphibious vehicles, dune/sport buggy and 4 wheel drive vehicles operated off-road.
Passenger Vehicle	A motor vehicle classified by the manufacturer as a passenger car or which is designed, constructed or adapted for the principle purpose of transporting passengers and includes a delivery car, but does not include a motorcycle, moped or motor vehicle which is designed, constructed or adapted for the purpose of carrying goods or commodities.
Property Damage Collision	A motor vehicle collision in which damage to vehicle and/or property was $1,000.00 or more, and which did not result in death or injury.

Public Service Vehicle (PSV)	A motor vehicle or trailer operated by or on behalf of any person, for transportation for gain or compensation of persons or property upon a highway, and includes a semi-trailer truck; but does not include the passenger-carrying-motor vehicles of an electric, or steam railway or motor bus company operating on the streets of a city, or school buses, ambulances or hearses or motor vehicle operated for gain or compensation under *The Taxicab Act* or a municipal by-law in cities, towns, and villages.
Repairer	A person who maintains a garage for the purpose of rendering services therein upon motor vehicles and/or trailers, at a charge, price or consideration; or who owns and operates a fleet of five or more motor vehicles or trailers; or both, and maintains a facility for their repair, is permitted under *The Highway Traffic Act* to obtain "Repairer" licence plates to be used to transport motor vehicles for repair from place of origin to the repair facility and return, and the testing of the motor vehicle after the repair work has been completed.
Rural Collision	A collision occurring on the provincial highway system where the posted legal speed limit is 90 or 100 km/h.
Safety Equipment	Seatbelts, safety helmets and child restraints.
Snowmobile Collision	A snowmobile collision which results in death, injury and/or total property damage of $1,000.00 or more.
Snow Vehicle	A vehicle that has a gross vehicle weight in exceeding 454 kilograms and a. is not equipped with wheels, but in place thereof is equipped with tractor treads alone or with tractor treads and skis, or with skis and a propeller, or is a toboggan equipped with tractor treads or a propeller, b. is designed primarily for operating over snow or ice, and is used primarily for that purpose, and c. is designed to be self-propelled.
Suburban Collision	A collision occurring on the provincial highway system where the posted legal speed limit is 70 or 80 km/h.

Taxicab	A motor vehicle had, kept, used, intended for use, or operated, for the transportation of persons for compensation, and includes such vehicles when garaged or under repair; but does not include a. a public service vehicle, b. a trolley bus or passenger-carrying motor vehicle or a public transportation system operating on the streets of a city, c. a school bus, d. an ambulance, e. a hearse, or f. a motor vehicle, or vehicle of a class of motor vehicles, that The Taxicab Board established under *The Taxicab* Act excludes from the definition of a taxicab under that Act.
Tractor	A self-propelled vehicle that is designed primarily for traction purposes, and that is not itself constructed to carry a load other than the driver, and includes a farm tractor but does not include a truck tractor or a special mobile machine.
Trailer	A vehicle designed for carrying persons or chattels, and for being towed by a motor vehicle, and includes a farm trailer but does not include an implement of husbandry that is temporarily towed, propelled, or moved upon a highway.
Truck	A motor vehicle or semi-trailer truck that is not a delivery car and that is constructed or adapted to carry goods, wares, and merchandise, freight or commodities, but not passengers or luggage.
U-Drive (Drive Yourself Vehicle)	A motor vehicle or trailer, kept for hire, that may be hired or rented without a drivers by the hour, day, week or longer but for which a single rental period is less than 30 days.
Urban Collision	A collision occurring on the provincial highway system where the posted legal speed limit is 50 or 60 km/h.
Vehicle Modification	A motor vehicle in which the axles, body, brakes, engine, steering control or suspension have been substantially altered or replaced with components of a different design or capacity from that approved by the manufacturer of the original vehicle.
Victims	All persons killed or injured in a motor vehicle related collision occurring on a public roadway.